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#### Justice John Marshall Harlan

Justice Harlan, member of the United States Supreme Court for nearly thirty-four years, died after a brief illness, of which the public was scarcely aware, on October 14. At the advanced age of seventy-eight even the physical and mental vigor of Justice Harlan could not resist an attack of acute bronchitis. To the judiciary, legal profession and nation at large the sudden announcement of his death came as a severe shock.

No justice commanded greater respect, trust and affection than Justice Harlan did at the time of his death. Had he been younger he would have been promoted by the President to the chief justiceship after the death of Melville W. Fuller. He had won this trust, this affection, by decades of hard work, faithful service, earnest devotion to the principles of American constitutional government, exceptional courage, candor and independence. He had been an active politician, a candidate for several offices, prior to his appointment to the Supreme Bench by President Hayes. But for decades the people have regarded him as essentially and pre-eminently a judge and jurist. He had strong convictions and principles, but he knew no party doctrines or prejudices. He was a genuine believer in democratic institutions, in liberty, equal opportunity and justice. He was not a "narrow constructionist" of the constitution, but he was not ready to make too many "concessions" to the supposed necessities of changed conditions in applying constitutional principles. He opposed "judicial legislation." He possessed a trenchant style and expressed himself forcefully and impressively, especially when the "prevailing opinion" of the majority of the court aroused his dissent. He wrote several famous opinions of the court in great cases notably in the Northern Securities case, where the Sherman trust law was very strictly applied. He criticised emphatically the decision which declared the income tax passed under Cleveland "direct" and therefore unconstitutional in the way it was levied. He dissented in the historic Philippine tariff cases, holding that the constitution should follow the flag and that no colonies or dependencies tyrannically governed outside of the organic law of the nation were ever contemplated by the fathers and founders of the Republic. He objected to what he considered dicta in the recent trust opinions-in the oil and tobacco cases, so-called-and to the reading of the adjective "reasonable" into the trust act. In this many leading men supported him, though the weight of authority seems to be against them.

Justice Harlan was a powerful thinker and effective speaker, and wrote and discussed many public questions in interviews and addresses. He always championed public rights and favored increase in federal power only as a means to an end—the end being better protection of public interests. He will long be missed and mourned, for while there is an abundant supply of legal talent, men of his type—rugged, aggressively public-spirited, progressive and impartial—are rare.

## The "Revolution" in California

Early in October the citizens of California voted on a score or more constitutional amendments that the legislature had submitted to them at their own demand. A most fruitful and progressive legislative session had already met the general desire for reform, but after a long period of rail-

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road and machine domination, of servility in the courts and legislatures, the embattled progressives felt that new checks and balances were necessary to re-establish popular government and prevent the restoration of the régime of privilege, spoils and graft. To "clinch" reform changes in the organic law were proposed.

All of the important and radical amendments were adopted by substantial or even heavy majorities. The most radical of all, which provided for the "Recall" and applied that safeguard to all state officials, including the judges, received the most tremendous majority, largely because of the failures and miscarriage of justice from which the state had long suffered. The outcome as a whole is regarded as a veritable peaceful revolution.

Next to the Recall the amendment which aroused the keenest interest and discussion was that completely enfranchising the women of the state. The equal suffrage amendment was adopted by a very small majority, as the liquor interests, monopolies and machine politicians had worked strenuously against it in the cities. It was voted into the constitution by the farmers, the voters of the villages and small towns. The country was more progressive on the issue than the city, especially the big city—a fact which constitutes a tribute to the woman suffrage movement. The triumph of the equal suffragists in so large, prosperous, progressive and splendid a state as California, following a similar triumph last year in the progressive state of Washington, is most significant and momentous. The number of women voters has been doubled in less than two years; the total now reaches 500,000-enough to decide a presidental election, assuming that women could ever vote as women.

Among the other notable amendments accepted were these: Establishing the referendum and initiative in order to control legislation when necessary; increasing the power and autonomy of cities; vesting large powers in the state railroad commission and making it appointive instead of elective; prohibiting the setting aside of jury verdicts by appellate courts for slight or technical errors at the trial; dividing the session of the legislature to secure deliberation and discussion of proposed acts.

Most of the amendments are considered sound and desirable even by moderates and intelligent conservatives. The ultra-radical changes are few, and they are the product of conditions and events, not the result of mere propaganda.

# Peace and War in the Old World

For many weeks the Moroccan question threatened to disturb the peace of Europe and reduce all arbitration efforts to a cruel mockery. Germany had sent a warship to Agadir and thus asserted "claims" in Morocco for which France had to compensate her. The latter nation admitted the validity of these claims, or was not disposed to challenge them. After tedious, trying diplomatic negotiations a settlement was reached. Germany agreed to withdraw her objections to French occupation and political ascendancy in Morocco, and France paid for this concession with a generous slice of her Congo. To this arrangement the other great powers saw no reason for taking exception. To a German port in Morocco England would have violently objected.

While this settlement reassured the industrial world and the peace advocates, an unexpected blow to the cause of peace, arbitration and respect for treaties was suddenly struck in another quarter. Italy decided that the time was opportune for annexing Tripoli, Turkey's last possession in North Africa. She had settlers and interests there, and had been promised the right to "pacific penetration"—a phrase that covers a multitude of things but is understood to mean the right to colonize, obtain control of mines and other resources, if found to exist, develop trade and gradually assert political influence. She had certain grievances against Turkey and her representatives in Tripoli—all of a very slight

character that would never have led to war under ordinary circumstances. But Italy was celebrating her jubilee of unity; the new generation desired glory and success in foreign adventure; the country was overpopulated and poor; emigration to America was heavy. Tripoli was at the very door of Southern Italy and Sicily, across the Mediterranean, and to take it was to provide a new outlet for Italian population and energy. Turkey was weak, without an adequate navy, and not too popular in Europe. The Young Turk régime had not wholly justified the hopes of the liberals and progressives, for reform was slow, while the intense nationalism and militarism of the Young Turks had led to revolt in Albania and to severe measures of military repression which offended Christian Europe.

All these considerations caused Italy to act with amazing disregard for the Hague peace convention, for the advanced sentiment of the world. She issued an ultimatum, demanded the cession of Tripoli, and proceeded to "take" that colony. With few exceptions, the independent and intelligent press and the public opinion of the world condemned her tactics. Turkey, even under the new régime, might be incapable of good colonial government or of genuine reform, but that was no excuse for high-handed grabbing, for annexing her territory, for ignoring the Hague convention. The Italian grievances against Turkey, if real and in the least serious, should have been submitted to arbitration. The executive committee of the Interparliamentary Peace Congress felt constrained to adopt strong resolutions deploring Italy's course. Italy, grieved and surprised, made many explanations and apologies to the world, but met with little sympathy.

There were at first fears of complications and the spread of the war to the Balkans. The powers at once addressed themselves to the task of localizing and limiting the area of the conflict. The Balkan principalities were warned not to dream of anti-Turkish war moves. Crete was warned to re-

main quiet. Italy was warned to attempt no hostilities in Turkey's European possessions. Turkey was advised to give up Tripoli and accept some pecuniary compensation, but her ministers were afraid to conclude a humiliating peace treaty, as they had to reckon with the fanatics and reactionaries who were plotting to overthrow the new order. Turkey has done little actual fighting, and Italy, it must be acknowledged, has sought to avoid bloodshed and destruction as far as possible. The war is one of the strangest known to history. It shows, however, that the nations are no longer cynical in the territorial grabs, that morality and honor are not wholly without influence, and the consciousness of wrong makes for compromises, apologies and concessions that aggressive diplomacy would have scorned a generation ago.



#### The Drift in National Politics

There are no important developments to record in the field of Democratic presidental politics. The leading "possibilities" are still Governor Woodrow Wilson, Speaker Champ Clark, Governor Judson Harmon, Representative Oscar W. Underwood and ex-Governor Folk of Missouri. Mr. Bryan is not a candidate in any sense, and Editor William R. Hearst is championing the cause of Speaker Clark, modestly refraining from advancing claims of his own. The issues of the next presidential election, as seen or foreseen by Democratic leaders, are tariff revision, further antitrust action, public economy and labor or social reform.

In the Republican camp the unrest is greater. The insurgents or progressives, with some exceptions, have firmly declared themselves opposed to the renomination of President Taft. At a conference held in Chicago late in October some two hundred delegates proclaimed their conviction that Mr. Taft ought not to be nominated and could not be elected. At the same time they disclaimed any intention of bolting a "regular" nomination or of supporting a Democratic or

independent candidate. They prefer Senator La Follette to Mr. Taft, but they are ready, if defeated in the preliminary campaign, to support Mr. Taft.

The objection to the President is based on his alleged lack of firmness and consistency, as well as "progressiveness." Senator La Follette is indorsed on his record as state and national reformer, and the Progressive platform demands constructive trust legislation in addition to destructive warfare on monopolistic trusts, resolute and fearless protection of popular rights and interests, and a presidential direct primary giving the rank and file of voters a chance to indicate their choice. The tariff is not mentioned. The Progressive platform is not radical. Some critics say it is milder and more cautious than the Taft platform as defined in the President's speeches on his recent tour and as exemplified by his actions as chief executive. However, it is not denied anywhere that La Follette is much more radical than Taft and that a campaign under his leadership would be a very different affair in all respects from a campaign under Mr. Taft's leadership.

The Progressives' demand for a "presidential primary" has been endorsed even in moderate newspapers. Now that we have direct nomination of mayors, governors, judges, legislators, as well as advisory votes on federal senators, a direct primary to indicate the voters' choice for the presidency is not a revolutionary innovation. Primaries do not always yield ideal results, owing to indifference and apathy of many citizens, but they are better than conventions, "controlled" delegates, caucus rule and midnight "slates." In our day the men who are fit to receive nominations for the presidency can afford to indorse the demand for a presidential primary—if they cannot afford not to indorse it.

In five states the law provides for such primary. Other states will provide for it before long. Meantime optional primaries can be arranged by the national committees and leading men of the great parties.

#### Assassination and Reaction in Russia

The murder of Premier Stolypin by a terrorist who was also a spy, or "secret agent" of the police, threatened to be a disaster to the liberal and constitutional movement. Stolypin was not popular; he was not in sympathy with the cause of progress; he was first of all a nationalist, and his policies were anti-Polish, anti-Jewish and anti-Finnish. His measures against revolutionary activity were denounced. even by law-abiding liberals as monstrous in their severity; he instituted drumhead courts-martial to try political offenders, and the executions under this system were so numerous that Stolypin early became known as "the hangman." He did not believe in the communal ownership of land and put laws through the douma to dissolve the communes and enable peasants to acquire land in fee simple. He violated the constitution whenever he found the course necessary to his plans. He incurred the bitter hostility of the most enlightened leaders of Russian thought. Even the conservative upper house, or council of state, censured him formally for a manifest evasion of the fundamental laws and a piece of political fraud.

Yet it is impossible to say that he was a reactionary, or that he did nothing for the cause of liberalism in Russia. It is strange but true that the bitter reactionaries, the extreme rightists, the fanatical adherents of autocracy, hated and detested him even more than the radicals and leftists did. By these elements he was called traitor and enemy; in their organs he was accused of favoring constitutionalism and undermining the throne and the state church. The reactionaries believe that Stolypin stood between them and complete restoration of the autocratic régime, and that without his intervention or protection the douma would have been abolished by the czar as a thing wholly vicious and dangerous.

It is possible that Stolypin saved the douma and thus rendered liberalism a signal service. 'A less moderate and

firm statesman might have lost the confidence of the czar and played into the hands of the bigoted defenders of the old order. Stolypin had courage, patience, administrative ability and tireless energy. His gifts were uncommon, and perhaps no one could have accomplished more than he did in the few years of his premiership. On this point opinions will never cease to differ.

His successor, Vladimir Kokovtseff, was finance minister under Stolypin and assistant finance minister under Witte. He has had ample experience and is credited with considerable acumen. His affiliations have not been liberal, but he is not a nationalist, and in his efforts to improve the finances and pacify the empire he may find it expedient to promote reforms of a liberal character. It is believed that he will seek to placate the Finns by respecting their autonomy and the Poles and Jews by opposing special, arbitrary legislation and political discrimination based on race or creed.

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### The Presidential Election in Mexico

The national election, on October 1, in Mexico passed off quietly. There was no disorder in any province, thanks to the measures of the provisional government and to the flight of the "conservative" candidate for the presidency, General Reyes, whose campaign against Madero, the hero of the anti-Diaz revolution, had been a complete fiasco. It must be admitted that many of the supporters of Madero had shown neither law-abiding spirit nor a sense of tact and expediency in their treatment of Reves. Free speech and free assembly are among the Madero pledges or planks, yet Reyes was not permitted to address public meetings in behalf of his candidacy. He finally concluded that he was not even personally safe in Mexico and left the country on the eve of the election. Madero thus became the only presidential candidate, and his election was "unanimous." The vote was not heavy; fraud and bribery were reported

from various places; yet the election was undoubtedly the freest and most popular Mexico had ever seen. Madero was the choice of the majority of the people, and he would have been elected in any case. His conduct during the campaign was worthy of all praise. There was cordial co-operation between him and the provisional president, de la Barra, whose position might have been made very difficult. Madero never attempted to dictate to the provisional government; he did not presume on his popularity or certain success in the elections. De la Barra, on the other hand, has been singularly successful and efficient.

While Mexico has not been free from trouble and disorder since the expulsion of Diaz, the wonder is that, considering the geographical, economic, moral and educational conditions of the republic, the trouble has not been graver. There have been local disturbances, strikes accompanied by violence, threats of new insurrections, denunciations of Madero and charges of bad faith on the part of the revolutionary leaders. But, on the whole, the prophets of woe have been disappointed. Order has been maintained with reasonable efficiency; the finances of the republic are in good shape; the nation looks hopefully to the future and expects a régime of gradual and sound reform under Madero, notwithstanding the fact that a few years ago many regarded him as a visionary, sentimentalist and theorist.



### Trusts, the Law and Public Interest

The earnest discussion of the trust problem, of the meaning of the Sherman law against restraint of trade, and of the future of that law or of the policy embodied in it, has continued, and no agreement is likely to be reached. The Taft administration, it is true, holds that the trust problem "is nearing solution," thanks to the recent Supreme Court decisions, and that men of affairs know now where they stand and can, if they will, readjust matters that do not

square with the law. But every statement that the President or the Attorney General has made in regard to trust policy and trust law has provoked controversy. Men identified with corporate affairs assert that they do not know where they stand—what is lawful and what unlawful in combination and co-operation. More light is demanded, but where is the light to come from? How are the doubts and differences to be resolved or reconciled?

It is clear the trusts may be divided into three classes. First, there are the trusts that, in the opinion of the public and the government, are manifestly illegal, oppressive, injurious to trade and the public welfare. These the government is prosecuting and seeking to dissolve. The heads of these corporations, in addition, may be, or are being, called to account criminally, on the ground that there is no possible excuse for those who deliberately, recklessly, maliciously violate the anti-trust law.

In the second class are trusts and combinations that are considered "good," that are not guilty of extortion, ruthless pursuit of profits, frenzied finance, but that yet in some way have offended against the law. They may have restrained trade by the form of their organization, or by methods that are not wholly "normal." These trusts are to be carefully investigated and invited to reorganize or eliminate objectionable features, the Department of Justice advising them, passing upon plans submitted by their own lawyers, and finally securing the approval of the reorganization by a court of proper jurisdiction. Combinations that decline to reorganize and reform will be prosecuted.

Finally, there are the combinations that are not guilty even of slight, technical infractions of the trust law, that have not restrained trade or sought to monopolize it. To these, of course, there is no objection on any ground.

This classification is, however, only theoretically satisfactory. Serious controversy arises where the status of a given trust needs to be determined. Is the Steel Corporation

one in restraint of trade? Its own directors emphatically declare that it is not. They issued a statement to the public, apropos of gossip and Wall Street flurries, denying that they had any intention of reorganizing the corporation or reducing its size. They had every reason to believe, and were assured by able counsel, they stated, that the Steel corporation was entirely "within the law," and had no fear of investigation or legal proceedings. The Department of Justice has begun to attack this combination.

The International Harvester Company, unlike the Steel Corporation, has conferred with the Attorney General, has offered to eliminate certain features deemed unlawful, and has invited close scrutiny and governmental supervision. It is reported that other combinations will follow its example and reorganize to conform to the law as now interpreted.

How many—time alone can tell.

The question Congress and

The question Congress and the people will have to thresh out and decide is this-whether size and scope of operations are to be definitely adopted as tests of monopoly. Does public policy demand the restriction of the size of combinations? Must the danger of monopoly be guarded against by prohibiting control of more than a given percentage of the total production of any article? Or is size no test whatever, and can combinations be as powerful and big as they like so long as they do not actually abuse their economic might? The outcry against limiting size and control is great, but it has not impressed those in public life. The practical question from the viewpoint of the average consumer is, however, whether we have, or are likely to have, trusts that are at once very big and very good-able to crush competition and sincerely determined not to abuse their power. The final solution of the "size" problem will doubtless depend not on theory but on conditions and facts.



Bronson Howard Author of "Aristocracy" (Courtesy of the Dramatic Mirror)



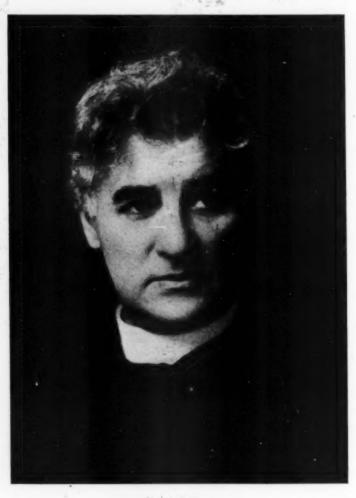
James A. Herne Author of "Shore Acres" (Couriesy of the Dramatic Mirror)



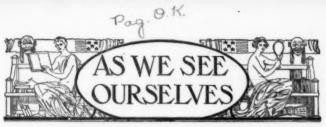
Clyde Fitch Author of "The City" (Courtesy of the Macmillan Company)



Denman Thompson
Author of "The Old Homestead"
(Courtesy of Current Literature)



David Belasco Author of "A Grand Army Man"



# IV. The Drama\*

Benjamin A. Heydrick, A. M.

In writing of American plays, the limitation to the period since 1870 is less felt than in any other literary form. In the novel this limitation excludes Hawthorne, in the short story it excludes Poe, in poetry it excludes Bryant. But if we seek for noted dramatists before 1870, the list is short indeed. Of all American plays produced prior to that date, but two survive on the stage today: Uncle Tom's Cabin, by an adapter whose very name is forgotten, and Rip Van Winkle, by the Irishman Boucicault.

The reason for this strangely retarded development of an important literary form is interesting. The drama—and throughout this article the term is used to describe plays written to be acted, not mere poems in dramatic form,—the drama is dependent entirely upon the theatrical manager. If he will produce plays by American writers they will be written, and written in abundance, as the history of the past few years gives evidence. If he will not produce such plays, they are not written, for the reason that it does not pay to publish them, and so the poor author has absolutely no chance to get his work before the public. The manager, therefore, through his control of production actually controls the writing of plays.

Up to the year 1891 there was no international copyright law. That meant that the American manager could

<sup>\*</sup>Mr. Heydrick's series began in the September, 1911, CHAUTAU-QUAN, with an article on "The Novel" which was concluded in the October number by a study of the purpose-novel. The November instalment discussed "The Short Story."

take successful English or French or German plays and produce them here without so much as saying by your leave. Why should he accept a play by an American author? If it failed—and scarcely one play in five succeeds—it was a heavy loss. If it succeeded, the royalty to the author was a constant tax upon profits. But by taking a foreign play, already a proved success, there was little risk of failure, and if it had a good run, there was no royalty to be paid. So the earlier managers, such men as the Wallacks and Augustin Daly and A. M. Palmer, gave us a succession of English plays, or of adaptations from the French and German, and the American drama not only did not grow, it never had a chance to be born.

Occasionally, however, a manager was found daring enough to produce an American play. The success of some of these, such as The Gilded Age, The Danites, and The Banker's Daughter, led others to venture. The passing of the international copyright law made managers honest by making stealing unprofitable, so a brighter day dawned for the American playwright. To-day, so complete is the change, nearly all the successful plays are by native authors. Of the forty new plays produced in New York in the theatrical season of 1910-11, more than three-fourths were by American authors.

In the list at the end of this article, the various plays have been grouped according to the phases of American life which they portray. The longest of these groups is that dealing with society. Bronson Howard in an earlier day, Clyde Fitch in our own time, have given us play after play on this theme. Howard's view of society is best seen in his Aristocracy, produced in 1892. The characters fall naturally into three groups: the Lawrence family, rich, aristocratic New Yorkers; the Stockton family, self-made Californians, worth millions, and a group of titled English and Europeans, most of them rascals. Stuyvesant Lawrence, the son of the New York aristocrat, is proud of the fact

that no one would ever take him for an American. falls in love with Vera Stockton, the California heiress. When his father hears of it, he inquires who the Stockton's are, and when he learns that the father had once been a street waif, he upbraids his son for even thinking of such an unsuitable alliance. But young Lawrence is deeply in love with the girl, and the families finally agree upon a year of probation before the marriage. This year the Stocktons spend in Europe, where they see the society of foreign courts, and Vera is sought by various titled rakes. By a trick she is made to believe that her lover is married. and in revenge she hastily marries an Austrian prince, a fellow of the most degraded type. A duel happily gets him out of the way and Vera and Lawrence finally are married. The impression given by the play is that European aristocracy is chiefly made up of a dissolute set of scoundrels and fools; that American society in our large cities takes this for its model, title-worship and ancestor-worship being its only religion, while to find true worth and manhood one must go to the self-made man of the Western states. The exaggeration of the play is obvious, yet the kernel of truth is there.

Clyde Fitch has a lighter touch, yet he cuts as deeply. In *The Climbers* he shows a group of people all eagerly bent on selfish aims: one seeks wealth, one social position, one happiness at any cost. They are brought together at a funeral. As soon as the services are over, several women call, ostensibly to show their sympathy, really to get at a bargain the Paris dresses which cannot now be worn. They find the widow and her daughter quite ready to talk business; the widow coolly lies about the cost of her clothes and drives a sharp bargain. Later we see a rich young man who is trying to get into society.

"I've got a coach and can drive four-in-hand. I've an automobile drag, and the biggest private yacht in the world building. I'm going to have the most expensive house in Long Island where the oysters come from, and I've bought a lot in Newport twice as big as the swellest fellow's there. I've got a house in London and a flat in Paris, and I make money fly. I think I ought to be a cinch at a classy success."

To gain the coveted social recognition, he marries a woman old enough to be his mother. On the wedding day

the daughter thus enlightens him:

"Of course you'll find mamma a little different when you see her all the time. You really won't see much more than you do now. She doesn't get up till noon, and has her masseuse for an hour every morning, and her mental science visitor every other day and her face steamed three times a week. She has to lie down a lot, too, but you mustn't mind that."

Another member of this precious set is a lawyer who embezzles trust funds. This is his defence:

"We're all climbers of some sort in this world. I was a climber after wealth and everything it brings. . . . I borrowed on some of Aunt Ruth's bonds and speculated—I made a hundred thousand in a week! I put back the bonds. But it had been so easy! . . . Finally I determined to make one bigger coup than ever. I took Aunt Ruth's bonds and all the money available in my trust, and put it all into this new company. It seemed so safe. I stood to be a prince among the richest. And so for a day or two I've known that nothing short of a miracle could save me from being wanted by the police. To-night I gave up even the miracle. That's all."

The worldly, the selfish, the shallow, the dishonest such are common types in American society as portrayed by Clyde Fitch.

Less severe is the tone of *The Butterflies*, a society comedy by Henry G. Carleton. Strong, an Englishman, complains that he can't understand American society.

"Don't try to," Fred Ossian replies. "There is only

one man who ever did understand it, and he's dead. Keep out of society. You would never succeed in it. You are too clever: you alarm people with ideas. Never bring ideas into society. Ideas make persons think. You have filled up your noddle with art and that sort of rubbish, don't you know, and literature—which is all very well in its way but tommy-rot to society persons. And then you are a bee. I am a butterfly. You work—I flit. I succeed in society. You never would."

"But if you never discuss art and-"

"No, no,-wouldn't do."

"But how do you converse?"

"I never converse in society. I twitter."

Another side-light upon society is seen in the conversation between Mrs. Stuart-Dodge and her daughter Miriam. Mrs. Dodge is trying to reconcile the girl to a rich suitor, and reminds her that she is engaged to the man.

"You mean-you engaged me."

"That is an immaterial point. He is the best catch of the season at whom you have had a chance. His father is worth at least eight millions. . . . I admit that these Greens are raw,—vulgar even, but we can tell our friends that—that it is eccentricity. There are many eccentric persons in society nowadays. Besides, we are Stuart-Dodges. We can afford to do what we please."

"Except marry whom we love."

"Love!—What mediæval and mildewed nonsense!—a pastime indulged in now only by the lower classes. Do the crowned heads of Europe marry for love? You are a Stuart-Dodge."

On the whole, the picture of American society given by the drama is much the same as that given by the novel, and neither portrait can be called flattering. If we compare it with English society, as pictured by Thackeray in the novel and by Pinero in the drama, the most that can be said is that we are no worse—and no better—than our English cousins. Democracy has failed to produce a fashionable class in any way superior to that which is found under other forms of government.

But the fashionable class fortunately is not representative of American life as a whole. In the next group of plays we find dramatists following the method of the story of local color. They have produced plays whose interest lies largely in the faithful presentation of life in some particular corner of our country—a New Hampshire farm, a tenement district in the city, a Western ranch—with the types of character peculiar to such localities.

Of these plays a typical example is *The Old Homestead*, which Eugene Field called the best play of American life yet produced. The plot is simple. A New Hampshire farmer, who takes city folks to board in the summer, has a son who goes to New York to make his fortune. After a time his letters stop, and the father goes to the city to look for his boy. He searches for weeks, and at last finds his son in low company, drunk. He takes him to his heart, and the boy, ashamed and penitent, begins life anew. The last act shows them all back at the old homestead with the neighbors come to rejoice at the wanderer's return.

It is the story of the Prodigal Son, a story as old as the human race, yet renewed in every generation. Just before the curtain falls the father says: "Hold on a moment: I want to say a word to our neighbors before they go. Now you fathers that hev got wild boys, I want you to be kind of easy with 'em. If they are a little foolish now and then, forgive them. Like as not it's as much your fault as theirs—they might have inherited it. You can't tell."

The success of the play was due not to its plot but to the absolute fidelity with which it reproduced the atmosphere of New England farm life. The opening scene showed the old weatherbeaten farm-house, with the wash-basin outside the kitchen door; the men come in from work, and dipping water from the rain-barrel, find "wigglers" in it. The closing scene shows the farm-house kitchen in winter: the old clock stands in the corner, bunches of corn and strings of dried apples hang on the walls. Aunt 'Tildy tells Uncle Joshua to go into the other room and turn the damper so the heat won't all go up the chimney. Such touches could not have been written-could not have been imagined-by a man whose idea of home was a steamheated flat. And the characters are racy of the soil. Uncle Josh Whitcomb, the kind-hearted, simple-minded farmer, "hard as a hickory-nut and spry as a kitten at sixty-four," comes to the city and is invited to the home of a boyhood friend, now a rich man. He sits down on an upholstered chair, for the first time in his life, and jumps up saying, "Gosh! I thought I sot on a cat." He is startled at a statue of Venus, and inquires what they do with it when the minister comes.

The play itself was an evolution. It was originally a half-hour sketch, written in 1875. Its success led the author to expand it into a play, called *Joshua Whitcomb*, which held the stage for eleven years. Then Thompson in collaboration with George W. Ryer wrote *The Old Homestead*, still retaining Josh Whitcomb as the central figure. So that for thirty-five years this actor played a single part. In *The Old Homestead* alone he appeared seven thousand times, and the play earned more than three million dollars.

New York City has proved a fertile field for the dramatist in search of local color. The earliest plays of this type, like *The Mulligan Guards*, were scarcely plays at all, merely a series of humorous incidents, introducing Irish and German types, the conversation full of dialect and slang. *The Auctioneer*, as acted by David Warfield, marked a decided advance upon such plays, being an extremely realistic portrayal of a familiar East Side type, the Jewish pedler. *The Country Boy* shows the typical characters in a New York boarding house: the stout land-

lady, vigilant of gas, the star boarder, basking in her favor, the surly bachelor, the married couple, the talkative youth, the show girl, and the country boy who has come to conquer the big city, and finds that it is too busy to pay any attention to him. Salvation Nell was a play of the underworld, showing the vicious, degraded frequenters of a low saloon, and how the Salvation Army reaches even to these depths with power to save.

The City, Clyde Fitch's last play, is a serious attempt to trace the influence of city life. George Rand, senior, is a prosperous banker and the chief man of affairs in Middleburgh, N. Y. His wife, who has social ambitions, is constantly urging him to move to a larger city; his son and his two daughters who have been away at school, are also eager for city life. "Who wants to smell new-mown hay in Middleburgh when he can smell gasoline on Fifth Avenue?" asks the younger daughter. But the father says he is too old to move. In the next act a degenerate young fellow named Hannock visits the banker and tries to blackmail him. This Hannock, though he does not know it, is really the banker's illegitimate son. The interview is a trying one, and weakens the banker's health. He dies soon after, but not without telling his son about Hannock and asking him to look after his half-brother. His death leaves the family free to go to the city. There the son engages in business and is very successful, although some of his dealings are not exactly honest. He enters politics, and advances so far that he is about to be nominated for governor. In obedience to his father's wish, he had taken Hannock with him as his private secretary, in spite of the fact that the man had vicious habits and was a slave to morphine. Hannock, knowing Rand's business affairs, demands promotion as the price of silence. Rand refuses, and finally orders him out of the house. He says he will go but that Rand's younger sister must go with him, as they are engaged to be married. Rand then tells him whose



Augustus Thomas Author of "In Mizzouri"



William Vaughn Moody Author of "The Great Divide" (Courtesy of the Macmillan Company)



Charles Klein
Author of "The Lion and the Mouse"



Eugene Walter Author of "The Easiest Way"

son he is: he refuses to believe it, and attempts to shoot Rand, and by accident kills the girl. The catastrophe puts an end to Rand's political career. His elder sister had married a man of bad character, and is seeking a divorce.

So the city has taken these three people and wrecked their lives. Yet was it the city? They went there with false ideals, ideals that would not have brought them happiness anywhere. The catastrophe of the play was the result of the father's sin, and might as well have happened in the country as in the city. At the end of the play Rand says:

"No, the city never ruined anyone; it merely brings out what is in them. It takes a man to the market-place, strips off his hide and says: 'Make good if you can!'

Plays of Southern life are few, due to the fact that most of such plays, like Shenandoah, deal with the Civil War period. Alabama is a notable exception. It is a play in which the atmosphere of the South is given with fidelity and charm, and it is noteworthy, too, as showing the rise of the new South, the industrial South, upon the ruins of the old. Colonel Preston, a gentleman of the old school, does not wish a railroad built through his land. To the Northerner who proposes to build it, he addresses these words:

"Your North came to my peaceful little corner here and ruined it. They took my only boy. They impoverished me in possessions, and affection, too. My heart was big enough, sir, but it couldn't keep your cavalry off my grave-yard. My colored servants loved me, but they have been driven away into vagabondage and theft and ignorance. My boy loved me, too, but—they estranged his love. . . . I wish to be left alone. I come out here at night because I can be alone. I don't want your railroad, Captain, screaming across my quiet bayou. I don't want anything from your people."

To this Davenport replies:

"I respect your feelings in the matter, Colonel Preston, but I can't help thinking it is your personal view that blinds you. Things, sometimes, are too personal for a correct appreciation. The North and South were two sections when they were a fortnight's journey apart by stages and canals. But now we may see the sun rise in Pennsylvania and can take supper the same day in Talladega. It is one country. Alabama sends its cotton to Massachusettssome of it grown very near your graveyards. The garment you have on was woven twenty miles from Boston. Every summer Georgia puts her watermelons on the New York docks. Pennsylvania builds her furnaces at Birmingham. The North took some of your slaves away-yes-but one freight car is worth a hundred of them at transportation. Your resentment, Colonel Preston, is eighteen years behind the sentiment of the day."

In the Middle West, A Grand Army Man gives the life of a small town in the 'eighties, the action centering about the G. A. R. Post. The County Chairman shows the political side of life in such a place, and exhibits the rural politician as quite as skillful in manipulating majorities as any ward boss in the city. The Gilded Age, once a popular play, owed its success to the character of Colonel Sellers. This entertaining personage, with his scheme for making millions by selling eye-water to the natives of India, embodies a real trait of our national character-the willingness to believe in enterprises that promise fabulous profits, a belief which is not in the least shaken by the failure of thousands of such enterprises. "There's millions in it!" cries Colonel Sellers in his enthusiasm, and in our own day Get-Rich-Ouick-Wallingford echoes his very words.

Of plays dealing with western life, Joaquin Miller's The Danites was so popular that a company was taken to England to produce it there. The play is surely western. The opening scene is laid in the Howling Wilderness saloon.

A Chinaman is being jostled about, and finally draws a pistol to protect himself. The Justice shouts:

"Has it come to this in California? A Chinaman draws a pistol on a white man in California! Bring that rope. Hang him! Hang him! and I'll pronounce sentence of death on him afterwards."

It is a crude melodrama, of interest now only as reflecting the intense prejudice of the Pacific slope against Chinese and Mormons. The Danites are supposed to be a secret society of Mormons whose members were sworn to hunt down and slay the men responsible for the death of their prophet Joseph Smith.

The Great Divide, by William Vaughn Moody, was one of the notable successes of recent years. The principal character is Ruth Jordan, a New England girl, who has come out with her brother to Arizona. Alone at the ranch house one night, she is attacked by three half-drunken To one of them, Stephen Ghent, she appeals for protection against the others, promising herself to him as his reward. He takes her at her word, and they go away together. They are married and go to a distant mining claim. He treats her with the greatest kindness, but she shrinks from him. After a time her brother finds her, and at his urging she goes with him, back to their old home in the East. But her life is cold, she wears herself out with self-reproaches, she is even indifferent to her child. Ghent has followed her secretly, he befriends the family, and at last gets an interview with Ruth. He convinces her that his love for her has made him a different man: she confesses she had loved him, but had been afraid to take the joy life offered. Her whole training had taught repression, sacrifice, denial; she now sees the power of good to transform evil, and goes gladly to the man she loves.

The play really deals with two opposing views of life. Ghent's attitude is: I have been evil, but love has made me a new man, and a good man, and I have a right to hap-

piness. Ruth's attitude is: He did wrong in seeking me by violence; I did wrong in saving my life at the cost of my honor: we must purge ourselves by suffering, we have no right to happiness. It is the conflict between Calvinism and Humanism.

The play is further significant as representing the contrast between East and West. This is seen in the setting; a cabin in the Cordilleras, perched on the edge of a canyon, with cactus plants dotting the landscape, is opposed to an old-fashioned home in a New England village, with portraits of clerical ancestors on the walls. It is seen in the spirit of the two leading characters. Ruth stands for the East, with its conventions, its restraint, its Puritanism; Ghent stands for the West, unconventional, obeying impulse, denying authority unless his reason sanctions it. Truly the Great Divide separates one from the other.

Of two popular plays of college life, Strongheart deals with the university, The College Widow with the small college. George Ade, author of the latter play, when called

upon for a speech on the opening night, said:

"We're not trying to caricature the college student, nor to set him up as a tin god; we're trying to treat him as a human being. Perhaps he doesn't deserve it, but"—and he dodged out of sight. The play shows the typical co-educational college of the Middle West, with the humors of campus life. The characters include a mild-mannered president, most attentive to wealthy philanthropists, a football player, recruited from an iron foundry, who is supposed to be studying art; a country bumpkin who in a short time becomes a college sport with frat pin and cigarette; the athletic girl, the intellectual girl, and the fluffy girl. It is full of local color, but not particularly significant as a criticism of life.

Turning now to the group of plays which deal with various occupations, we find in Bronson Howard's The Henrietto a theme somewhat similar to 'that of The City.

Nicholas Van Alstyne, a man who began life on the farm, brings to the city a strong constitution and good habits, and devotes himself to making money, forgetting moral scruples. His son shows what the second generation becomes: he is dishonest, unfaithful to his wife, treacherous to his brother, and in his passion for gaining wealth, plans to bring on a panic in Wall Street which would ruin his own father. The play is a protest against the madness for money-making which is conspicuous in modern life.

The Fourth Estate finds its theme in the control of the press by political and financial interests. A set of speculators want to get control of a valuable corporation. A Federal judge is found who is willing to exceed his powers to throw the corporation into a receiver's hands, thus enabling the speculators to carry out their scheme. A reporter named Brand gets the facts, and his paper announces that the whole story will be published. A lawyer comes to Nolan, the owner of the paper, and in the name of powerful advertising interests, demands that the story be suppressed, and the reporter dismissed. Nolan sees a chance to make his paper appear as the people's champion, and refuses. He publishes the story, and makes Brand the editor of the paper. But this story was only one chapter in the history of this judge. Later the judge himself approaches Nolan and offers to propose him for membership in an exclusive club. This flatters the owner, and he tells Brand about it.

"My girl ought to be able to go anywhere, but she can't in this cold man's town. My wife and children ought to be happy with the money I've got, and as I figure it, if I join this Oak Door Club I can help them to get what they want. Do you follow me, Brand?"

"Yes, I understand. That's the history of newspapers. They start when their owners are poor, and take the side of the people, and so they build up a large circulation, and as a result, advertising. That makes them rich, and they

begin, most naturally, to associate with other rich men. They play golf with one, and drink whiskey with another, and their son marries the daughter of a third. They forget all about the people, and then their circulation dries up, then their advertising, and their paper becomes decadent and feeble."

Brand finally gets a story that if printed will drive the judge from the bench. He comes to the office to prevent its publication, and offers a large sum as a bribe. His daughter, who is engaged to Brand, adds her pleading to her father's. Brand says to her:

"I have no right to think of you or of myself. I am an instrument to an end in the history of a great cause.

. . . Judge Bartelmy, the power of men like you must be destroyed. When justice is corrupt, the nation rots. If I keep silent about you and your methods, I become your accomplice. I betray my trust, just as you have betrayed yours. Judge Bartelmy, that story goes to press!"

There is not space to discuss other plays which reflect various aspects of American life: it is worthy of remark that within the last decade the field of the dramatist has broadened exceedingly. The theater, the department store, the commercial traveller, even the harmless necessary commuter have furnished themes for plays. It is a healthy sign, this turning from conventional themes and seeking fresh material in every-day life.

In the group of plays dealing with national problems, politics has first place. Of the numerous plays in this class *The Man of the Hour* may be chosen as a portrayal of municipal politics. The scene of this play, as the program informs us, is "any large city;" the time, "to-day." Charles Wainwright, capitalist, wishes to secure a valuable street-railway franchise from the city. He calls in Harrigan, the political boss, and offers him a large block of stock to put the deal through the council. This settled, the question is how to get the right kind of aldermen elected.

They determine to put at the head of the ticket Wainwright's nephew, a young man of wealth and position, but new to politics. As candidate for mayor he will give respectability to the ticket, and carry through the others. It all works smoothly as planned, but when the franchise comes up the young mayor develops unexpected independence; it is even rumored that he will veto the measure. The capitalist and boss bring all sorts of pressure upon the young man, threatening him with financial as well as political ruin, but he stands firm and defeats the scheme.

A Gentleman from Mississippi has national politics as its field, and "graft" as its theme. Certain congressmen have secured a vast tract of land on the Gulf which they propose to sell to the Government as a naval base, and thus make a fortune for themselves. To accomplish their ends they have an old-fashioned Southerner, Mr. Langdon, elected to the Senate. He is entirely ignorant of politics, and of course does not suspect the scheme in view. His son, however, is given a chance to go in, and invests his own and much of his father's money in it. Thus the net is woven about the honest man. When he sees it, he is furious. A colleague assures him that it is all right, adding:

"I've been here so long that I know what Washington is like."

"I reckon, Senator, you've been here so long that you've forgotten what the United States is like. Why, way down in Mississippi, forty miles from a railroad, I heard the sound of the country waking up."

He refuses absolutely to go into the scheme, and in the end defeats it by threatening to expose the schemers on the floor of the Senate.

The power of money in politics is shown strikingly in The Lion and the Mouse. John Ryder, master financier, is the power behind a great railroad threatened by adverse legislation. Ryder's money has bought legislation and corrupted judges, but one man, Judge Rossmore, who stands

in the way of his illegal acts, is incorruptible. Ryder deliberately plans his ruin. Through his machinations, the judge is induced to put all his savings into a company that soon afterward fails; the stockholders lose everything. By the suppression of certain facts, it is made to appear that the judge has received a bribe. His fortune swept away, and impeachment staring him in the face, the judge is saved by his daughter's cleverness in securing the missing papers which prove his innocence. The theme of the play is the power of great wealth to control politics and pervert justice.

In general, then, the drama presents American politics in the same light that fiction presents it. Local politics are in the hands of shifty little politicians; municipal politics are honeycombed with graft, in state and national politics, the big interests control by the same methods. Elections change men, but the same powers exercise the real control. Yet not willingly or knowingly are the people thus deprived of their power: they follow better leaders when they can find them. As the newspaper man tells the gentleman from Mississippi:

"We want men in Congress who can distinguish between the Constitution of the United States and the by-laws of some grasping corporation. We want patriots, not politicians. We don't want the kind of politician whom the day after election you will find in some private office not far from Wall Street, getting his instructions."

And what the people want they are pretty sure, sooner or later, to get.

Three recent plays deal with the race problem, treating respectively of the Indian, the negro and the Jew. In each the question is made acute by introducing a love affair between persons of opposite race. Strongheart, in the play of that name, is a full-blooded Indian, a student at Columbia University. His purpose in life is to go back to his tribe and help them. A brilliant man, and a football player, he

is on a footing of social equality with his classmates. He falls in love with a society girl, the sister of a college mate, and proposes to her. She rejects him at first, then finding that her love is stronger than she knew, consents to marry him. But in the meantime a call had come from his people; he learns that to go back with a white wife, alien in all her ways, would weaken his influence with the tribe. The call of his people, and the realization of the difference in their blood, lead to a pathetic farewell.

In The Nigger a young Southerner with fine prospects, engaged to a beautiful girl, learns that he has negro blood in his veins. After a struggle he gives up his sweetheart and goes to help his own people, the negroes. As A Man Thinks offers a different solution: the Jewish girl marries her Gentile lover, and the play attempts to prove that the barrier between them is a false one. It is interesting to note that in Zangwill's play, The Melting Pot, the author takes the same stand. These plays are significant rather as showing the strength of race prejudice among us than for offering any solution of the problem.

In The Easiest Way the problem is moral. Laura Murdock, a beauty of the stage, is a woman with a past. At present she is supported by a rich New Yorker named Brockton, who gives her the luxury which she craves. While playing a summer engagement in the West, she meets John Madison, a reporter. They fall in love, and she tells him her history. Brockton comes to accompany her back to New York, but she tells him that a real man and a real love have come into her life. So she goes back to New York alone, while Madison stays to make his fortune that he may marry her. But she finds the theatrical season very dull: no position is open to her, and she has no wealthy protector to intercede with managers. Daily letters come from Madison, but no news of a fortune. After six months Laura is at the end of her resources: she has pawned her jewels and dresses, is living in a dingy

boarding house, and, unable to pay her rent, is threatened with being put out. At this crisis a girl, a former friend, comes to see her, and urges her to go back to Brockton. She yields. A month later Madison comes to New York, unannounced. He has made his fortune, and comes for Laura. He asks her to marry him at once, and she consents. He has heard a rumor about Brockton and asks her; she says she has not seen him since she broke off with him. Then Brockton himself enters, Madison learns the truth, and leaves her forever. She had taken the easiest way, and now she sees where it has led her, and sees, too, her own future, doomed to sink lower and lower. The play ends with her cry of despair.

It is not a pleasant story. The author has not allowed the desire of the public for a happy ending to swerve him from carrying the situation to its inevitable end. The play moves forward to the catastrophe with the inexorability of

a Greek tragedy.

Taking these plays as a whole, one cannot but be impressed with the close relation they bear to actual life. The characters in *The Old Homestead* were drawn from real people in New Hampshire: the political leader in *The Boss* is a portrait of "Fingy" Connors; Ryder the capitalist in *The Lion and the Mouse* is John D. Rockefeller himself; the inquisitorial methods of the New York police moved Charles Klein to write *The Third Degree*, and the play led to the enacting of a law forbidding such methods. This close contact of the play with actual life, closer perhaps than in the short story or the novel, is significant. It points to a time when the drama may become not only a reflection of our national life but a potent force in shaping that life.

Perhaps the most interesting point brought out in our study of literature thus far is that emphasized in *The Great Divide*, the contrast between East and West. The various national problems, the menace of capitalism, the

evils of our political system, these things are only too familiar. But that our people are not really one, that there is a new line of cleavage, not between North and South but between East and West, that it is conceivable that political issues may arise which would make this cleavage sharply defined—this is matter for our serious consideration.

## DRAMAS REPRESENTING AMERICAN LIFE

PLAYS DEALING WITH SOCIETY

Saratoga, The Banker's Daughter, Young Mrs. Winthrop, Aristocracy, Bronson Howard; A Modern Match, The Social Swim, The Moth and the Flame, The Climbers, The Truth, The Way of the World, Clyde Fitch; The Wife, The Charity Ball, H. C. De Mille and David Belasco; The Butterflies, Henry Guy Carleton; Clothes, Avery Hopwood and Channing Pollock; The Spendthrift, Porter Emerson Browne; The Movers, Martha M. Conheim.

#### PLAYS OF LOCAL COLOR

Rural New England

The Old Homestead, Denman Thompson and George W. Ryer; Shore Acres, James A. Herne; The County Fair, Charles Barnard; Way Down East, Lottie Blair Parker; Lover's Lane, Clyde Fitch; Rebecca of Sunnybrook Farm, Charlotte Thompson and Kate D. Wiggin.

New York City

The Mulligan Guards, Squatter Sovereignty, Reilly and the Four Hundred, Edward Harrigan; The Auctioneer, Lee Arthur and Charles Klein; The Music Master, Charles Klein; The Country Boy, Edgar Selwyn; Salvation Nell, Edward Sheldon; The City, Clyde Fitch; The Commuters (suburban life), James Forbes.

The Middle West

The Gilded Age, George B. Denison and Mark Twain; A Grand Army Man, David Belasco, Pauline Phelps, and Marion Short; In Mizzouri, Augustus Thomas; The County Chairman, George Ade.

The South

Alabama, Augustus Thomas; Esmeralda, Frances Hodgson Burnett and William Gillette.

The Far West

The Danites, Joaquin Miller; Arizona, Augustus Thomas; The Squaw Man, Edwin Milton Royle; the Virginian, Owen Wister; The Round-Up, Edmund Day; The Heir to the Hoorah, Paul Armstrong; The Great Divide, William Vaughn Moody.

College Life

The College Widow, George Ade; Strongheart, William C. De Mille.

PLAYS DEALING WITH AMERICANS AT WORK

Wall Street

The Henrietta, Bronson Howard; The Ring Master, Olive Porter; The Gamblers, Charles Klein; The Speculator, George H. Broadhurst.

The Department Store

Glad of It, Clyde Fitch; Maggie Pepper, Charles Klein.

Journalism

The Fourth Estate, Joseph M. Patterson and Harriet Ford; The Lottery Man, Rida Johnson Young.

The Commercial Traveler

The Traveling Salesman, James Forbes.

The Theater

The Chorus Lady, James Forbes.

The Criminal

Alias Jimmy Valentine, Paul Armstrong and O. Henry.

#### PLAYS DEALING WITH NATIONAL PROBLEMS

Politics

The Mighty Dollar, Benjamin E. Woolf; The Texas Steer, Charles Hoyt; the Senator, David D. Lloyd and Sydney Rosenfeld; A Gentleman from Mississippi, Thomas E. Wise; The County Chairman, George Ade; The Boss, Edward Sheldon; The Man of the Hour, George Broadhurst; Mater, Percy Mackaye; The Woman, William C. De Mille.

Capitalism
The Lion and the Mouse, Charles Klein; The Battle, Cleveland Moffett; The Great John Ganton, J. Hartley Manners and A. J. Eddy.

Race

The Nigger, Edward Sheldon; The Clansman, Thomas Dixon; The House Next Door, J. Hartley Manners; Strongheart, William C. De Mille; As a Man Thinks, Augustus Thomas.

The Easiest Way, Just a Wife, Eugene Walter; A Man's World, Rachel Crothers; Anti-Matrimony, Percy Mackaye.

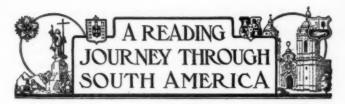
Divorce

The New York Idea, Langdon Mitchell; Rebellion, Joseph Medill Patterson.

Religion

The Faith Healer, William Vaughn Moody.





# IV. Argentina\*

Harry Weston VanDyke

N TO nation of the southern continent is better qualified than Argentina to rebuke the stupid jest that refers to the Latin-American countries as opera bouffe republics. It has a domain one-third the size of the United States, or as large as the territory lying east of the Mississippi, with Texas added, stretching from tropic heat to antarctic cold, and possessing a salt water frontage on the Atlantic as extensive as our own coast line from Portland, Maine, to Key West, Florida; it has over 500,000,000 acres of its 1,135,-840 square miles of area available for the cultivation of life-sustaining products and distributed over vast, treeless, well-watered plains, every one of which is easily accessible to the Atlantic seaboard with the simplest of railway construction. These plains have no such natural obstructions to transportation as our Alleghanies or Rockies, and have for their produce a much shorter haul to the European world of consumers.

It has the further advantage of over 18,000 miles of

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This is the fourth instalment of the Reading Journey through South America, which began in the September, 1911, CHAUTAUQUAN with an article entitled Discovery and Conquest. The Colonial Period and War of Independence appeared in October, and Brazil in November. The author, Mr. Harry Weston VanDyke, who is a member of the Washnigton, D. C., bar and a Licenciado in Spanish law, writes by recommendation of and co-operating with the Pan American Union, Hon. John Barrett, Director General.

up-to-date railways radiating from its port cities, and five river systems, one of which, La Plata, constituting the outlet for the waters of the Paraná and Uruguay rivers, is second only to the Amazon among the world's great rivers, with a width of 180 miles at its mouth, and pours into the Atlantic a flood greater by eighty per cent than that

cast by the Mississippi into the Gulf of Mexico.

It has timber regions as large as one of the principal European countries, rich in structural and cabinet woods; it has a grazing industry which, in 1909, produced 120,000,-000 sheep, or more than any country except Australia; 30,000,000 cattle, a product second only to that of the United States; 5,000,000 horses, ranking next to Russia and the United States in this industry, and 5,000,000 goats, pigs and mules. It has an agricultural output that places it in the first rank of the world's producers in flax, in the second rank in corn, and in the third in wheat, and possesses a soil that can grow still greater quantities of sugar, tobacco, rice, alfalfa, grapes, fruits, yerba maté (Paraguay tea), olives, corn, barley and oats, besides medicinal, textile and tinctorial plants, enabling her to export more food stuffs, including meats and grains, than any nation on the globe-a productiveness so great that farms are measured in some sections by the square league, instead of by the paltry acre, as with us, and grains are sold by the metric ton of 2,205 pounds, instead of by the bushel.

It has a metropolis and seaport (its capital, Buenos Aires), reckoned as the second Latin city in the world, possessing a population of over a million and a quarter, and adorned with buildings, parks, surface improvements and evidences of wealth and culture that stamp it as one of the finest cities of the Western Hemisphere.

It has a stable and enlightened government modelled after our own and advancing rapidly to a near approximation of our own in efficiency; it has a history rich, in its later years, in traditions of statesmanship and patriotism, bearing on its roll of honor the names of such statesmen, soldiers, educators and executives as Belgrano, San Martín, Alvear, Puyrredón, Rivadavia, Mitré and Sarmiento, names worthy of special reverence among a people familiar with the standards set by Washington and Lincoln.

In a word, with all this material greatness, and such a record of energetic and enlightened adaptation to world progress, Argentina may, in the not distant future, turn the jest against its northern perpetrators; for a country with a population of nearly seven million, which can feed two hundred million people and give lodging to half that number, is a competitor to be reckoned with seriously in the struggle for commercial supremacy.

Such, then, is the country of superlatives that opens up before the visitor who enters at its gateway, Buenos Aires, and breathes in the wholesome, equable breezes from the pampas—the vast green plains that stretch away for hundreds of miles in three directions; he agrees at once that the City of Good Airs was well named by Pedro de Mendoza when he planted his ill-fated settlement on its site in 1535.

Out of his pride in his great port city, the Porteño will tell one that Argentina has but two parts: the one, Buenos Aires; the other—all the rest of the country, called El Campo, or the Camp, regardless whether the inquirer includes in this sweeping assertion such other Argentine railroad centers and ports as Rosario, La Plata, Paraná, Tucumán, Córdoba, or Bahia Blanca—all of them cities exceeding fifty thousand in population and one of them, Rosario, exceeding one hundred thousand.

The Bonarenses may well be proud of their metropolis, the greatest Spanish-speaking city in the world. The Parisian is pleased to say, "Paris is France"; with even greater significance may the Buenos Airen say that Buenos Aires is Argentina. One-fifth of the country's inhabitants is absorbed into its teeming life of industry and luxury; it is the crystallization of all that this modernized young giant stands for in the world of commerce. Its dominant

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position was not achieved, however, without years of contention with other centers of industry in the country. During the three hundred years of Spain's stifling economic policies in this, the agricultural unit of her golden empire (briefly described in a preceding article). Argentina made small progress. The settlements founded in Santiago (1553) in Tucumán (1565) and in Córdoba and Santa Fe (1573). by the immigration of Spaniards from Peru, Chile and the early settlement of Buenos Aires, all led an isolated and neglected existence during the colonial period up to the year 1776, when Spain, awakened from her dream of mineral riches in South America to a realization of the importance of the fertile country of La Plata, erected it into a separate viceroyalty independent of the viceroyalty of Peru. The viceroys, freed from the poisoning influence of Andean wealth, did much to develop a sense of nationalism among the scattered agricultural centers. With the growth of this nationalism, the protests against Spain's repression increased until 1810, when the people asserted their right to an unrestricted, independent national life. May twentyfifth of that year is their Fourth of July, and is perpetuated today in the name of the superb Avenida de Mayo in their capital city.

During the formative period that followed, Argentine politics revolved chiefly about the question of Unitarianism or Federalism—whether the rich and progressive province at the gateway of the nation (Buenos Aires) should form a separate unit of government, or remain part of a centralized federal government and be accorded the leading rôle in national affairs which its importance merited. In 1862 federalism prevailed and the integrity of the Argentine Republic was assured, under the presidency of General Mitré; the capital was later removed from Santa Fe to Buenos Aires and the latter city erected into a federal district (of some seventy square miles) somewhat similar to our own District of Columbia. The capital of the Prov-



State capitol-La Plata.



Department of Justice-Rosario.



Recoleta Cemetery, Buenos Aires.

This cemetery occupies an area of nearly 13 acres. The entrance is embellished with a gigantic marble cross by the celebrated sculptor, Monteverde, and the interior abounds in notable statues.



The City of the Dead and the City of the Living.



Colon theater-Buenos Aires.



Federal capitol-Buenos Aires.



One of the popular restaurants of Buenos Aires.



Avenida de Mayo, Buenos Aires—illuminated in honor of Secretary Root on the occasion of his visit to the capital in 1910.

ince of Buenos Aires is now La Plata, a few miles distant from Buenos Aires on the shores of the great river.

This period marks the beginning of the real history of the Argentine nation. Under the enlightened statesmanship of Bartolomé Mitré and Sarmiento, the two chief figures in Argentina's rapid development from this point, the great influx of British and German capital began. Immigation was encouraged for the working of the fields; a solid foundation was given to educational development; railroads were constructed, and the machinery of government made adequate to the vigorous strides of the solidified nation. In the short space of time that has passed since 1881, over two billions of dollars of British and German gold have been invested; some eighteen thousand miles of wellequipped railways constructed, almost wholly by English capital; immigration has doubled the population of the country so that now half its present inhabitants are foreignborn, and a thorough system of education has been perfected, embracing three great universities, one of which, at Buenos Aires, graduated over five thousand young men last year and, with the University of Córdoba (founded in 1613), ranks with Harvard and Yale.

The city of Buenos Aires has not the picturesque environment that adds so much to the natural beauty of the cities of Rio de Janeiro and Mexico, nor the harbor facilities of New York; nor are its culture and civic personality, perhaps, as deep-rooted as in Boston; it makes little pretention to the aristocracy of blood boasted by the still essentially Spanish Lima; nor has it yet attained such distinction as a national center of art, literature and music as has the Brazilian capital. It may be best compared with Chicago, for it is conspicuously modern, its present development having been begun and achieved within the last quarter of a century, although the city itself is nearly four hundred years old, and it is the industrial complement of an agricultural activity even greater than that of our Middle

West. Its banks and clearing houses are said to transact as much business as those of Chicago.

The docks of Buenos Aires, like those of our great lake city, are most impressive; they represent an outlay of \$50,000,000. Only fifteen years ago the visitor was bundled ashore in a small rowboat and deposited on a marshy beach. Now his vessel enters one of the numerous basins of the vast dock system and confronts row upon row of massive wharves, at the back of which spreads a network of railway lines, while in the background the public gardens with their flowering bushes and statuary beautify the approach to the city.

For mile after mile these docks stretch their length, flanked by a seemingly endless procession of great trans-Atlantic ships and up-river produce boats, broadside to the wharves, and, without, lying at anchor in the river awaiting their turn for a berth, are many more; for this giant enterprise, these miles of brick and stone, with towering grain elevators and a veritable forest of powerful cranes,

already fails entirely to satisfy present needs.

Not even the New York wharves with their vast commerce give such a picture of vivid bustle. The big German "Cap" boats—Cap Ortegal, Cap Frio, and the rest; French, Spanish, and Italian liners with champagne, aperitifs, opera companies, automobiles and immigrants—always immigrants; Newcastle freighters unloading bolted sections of steel bridges; up-river boats laden with yerba maté or fragrant oranges from Paraguay, and the aristocrats of these seas, the Royal Mails from England—all contribute to the pell mell of idiom, reminding one of the blurred babel of tongues that whispers across the decks of the world's ships in the drowsy passage through the Suez Canal.

And, parenthetically, a most telling commentary on our indifference to Argentine possibilities lies in the fact that of the many thousand vessels that transferred cargoes at these docks in 1910, only four bore the stars and stripes; where-

as, prior to our civil war (which, of course, absorbed our merchant marine)—in 1852—there were in the harbor of Buenos Aires six hundred vessels flying our flag, or more than double the number from all other nations combined. In those days American influence in the commerce of the southern half of South America was predominant; a Pennsylvanian, William Wheelright, was looked upon as the father of that commerce.

On leaving the docks and driving up into the city, the visitor is at once impressed with the fact that Buenos Aires is not so wholly wrapped up in the purely material as is our commercial center at the head of Lake Michigan; it has broadened along more aesthetic lines and is cultivating the graces of cosmopolitanism. In the newer parts, particularly in the fashionable suburb of Belgrano, the buildings and shaded boulevards and beautifully landscaped parks resemble rather those of Paris; although it is not behind our own big cities in public utilities. Even in the business district there are no sky-scrapers or elevated railroads to disturb the harmony of the architectural scheme; not even the usual promiscuous, blatant advertising posters are permitted to be displayed until they have been censored by the proper official, and when approved they are affixed to handsomely tinted and panelled billboards erected for the purpose. So keen, indeed, are the Bonarenses to enhance the beauty of their city that a prize is offered each year for the handsomest structure to be erected. And yet, in the older parts, there is much that does not suffer by contrast; the occasional glimpses of blossoms and foliage one gets through doorways opening into the courtyards, or patios, of the old Spanish houses is most refreshing in the midst of so much that is modern.

It is from Paris, too, that they have acquired their culture, and their taste in dress and amusements and in literature and art; they buy their clothes in Paris and sip their French liqueurs in the cafés in true Parisian style,

and they are entertained by opera and comedy companies from the best Parisian theaters. They have absorbed into their city life an Italian colony that exceeds in numbers the population of Genoa, and more Peninsular Spaniards than could be crowded into Toledo, besides a multitude of British and Germans and a goodly sprinkling from the rest of Europe and from Asia. Having taken so much from France and Italy, and being Spanish in descent and in speech, the overtone of the city is distinctly Latin, while their industrial and governmental institutions bear the mark of the Anglo-Saxon. The Bonarenses, however, passionately insist upon a recognition of their own distinct personality; they are the Porteños of the great Argentine nation. Nor do they and their compatriots throughout the country welcome the inference that they are Spanish; they are Argentine. One asks a child of the streets whether he speaks Spanish or Italian. He answers haughtily (in the former language): "At home we all talk Argentine."

The Porteño, as well as his brother in the Camp, is intensely patriotic. Strangely enough his jingoism is not offensive; it is displayed with an amiable candor that is quite disarming. Not satisfied with being Argentine from top to toe, he will seek to Argentinize even the transient guest. The rabid Argentinism of the Porteño, and his success in amalgamating the kaleidoscopic horde of Europeans and Asiatics immigrant to his city, is illustrated by the answer of another youthful immigrant who, unable to deny that he was born in Genoa, murmured apologetically, "I was so

little."

Next to the Italian and Spanish, the British colony is the largest. Then follow the German and the French. The North Americans are small in number; less than three hundred responded to a recent effort to organize the North American Society. In this most cosmopolitan of cities the foreigners foregather in little worlds of their own. Most are represented by newspapers published in their own languages, and most have club houses, more or less pretentious. The best theatrical companies come from across the water to the theaters, among which the Colón is one of the finest on the Western Hemisphere. On the same evening last season, "The Merry Widow" was produced in Spanish, French and Italian in as many different theaters in Buenos Aires.

Club life is one of the most attractive features. The Britishers (the heaviest investors of foreign capital), of course, have their inevitable cricket, polo and races-at Hurlingham, near the city—and have erected a substantial country club house devoted chiefly to their ritualistic five o'clock tea. The scene on the broad verandas and wellkept lawns is brilliant in the afternoon with the white lace gowns of the women and the white flannel and broadside panamas of the men. As the guest looks on at the leisurely game of cricket and tea-for both rites are solemnized together by the comfortable Briton-he can easily imagine himself at Shanghai, Hong Kong, Singapore or Cape Town, where the same function is taking place at the same hour of the day, on club grounds almost identically the same, and to the accompaniment of the same elaborate conversation: "Well played, old chap."

Among the fifty or more social organizations in Buenos Aires, the Jockey Club is the Argentine cercle par excellence. Its home on Calle Florida is of a splendor unsurpassed in clubdom. The guest who is fortunate enough to enjoy the courtesies of this exclusive Argentine club will be impressed by the perfect taste and sumptuousness of its interior; the superb marble stairway, the banquet hall and the famous pictures and sculpture are equalled in but few of the palaces of Europe. Its wealth, made up of an initiation fee of \$4,000 and annual dues of \$1,500 for each member, and a "rake-off" of ten per cent of the betting on its racetrack, together with gate receipts, accumulates so rapidly that it is a source of genuine embarrassment to its governing board. A short time ago the club

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voted to devote its surplus to the purchase of a dozen blocks in the heart of the city, the tract to be turned into a beautiful boulevard. The undertaking, which would have cost nearly fourteen million dollars in our money, was abandoned, not because of the cost, but on the ground of impracticability. During the racing season held under its auspices at Palermo Park, the Porteño is seen at his best. Paris gowns and picture hats are displayed in profusion in the grandstand, lawns and luxurious victorias and automobiles that line the course, and with the correct dress and animation of the men, and the prodigality everywhere in evidence (last season \$25,000,000 were placed on the horses), the scene takes on an aspect truly Parisian.

The Germans, Italians and Peninsular Spanish also have luxurious clubhouses, and for the transient visitor, the Club de Residentes Estranjeros affords a delightful retreat.

As might be expected in such a vigorously modern city, the severest of the restrictions to social intercourse familiar in Latin capitals are here impatiently thrust aside. In the five o'clock parade of the fashionables that wends its way towards the beautiful Palermo Park on Sundays, there are no closed carriages or dark mantillas to conceal the allurements of the señoritas, although they still huddle demurely at the sides of their dueñas while they distribute the most decorous of smiles among their eager acquaintances of the opposite sex. In the same throng of carriages may be seen the reigning music hall favorites, at whose sides are sure to be found many care-free horsemen just in from the Camp, mounted on superb stallions heavy with silver trappings, and generally with an air of less sophisticated enjoyment of the event.

There is a prodigality about the Porteño in his pleasures that staggers the visitor from the North. Backed by an almost limitless wealth from cattle ranch or plantation. he scatters his *pesos* with a princely hand. And, of course,

there is an obverse to the picture; there is an under world, peopled largely by immigration from the centers of European unrest, in which there is to be found an extreme of destitution. This part of the opulent city is the breeding place of socialism which frequently finds expression in violence and which is surely becoming one of the city's most serious problems.

The zest for amusement among all classes finds many outlets. Strolling along Calle Florida, or Calles Cangallo, Esmeralda, Cuyo, Maipó and other well-paved, brilliantly illuminated streets of the theater district, after the fever of the business day has subsided, one drops in at the "English Bar," the "Bierhalle," "Confiteria," or "Café Parisien," and is sure to find a compatriot to join him in the refreshment of his predilection.

Or, for the more solid enjoyment of dinner, the visitor, whether French, American, Briton or Turk, can find his favorite national dishes excellently served, at the Restaurant Charpentier, where an orchestra, really brilliant, will for the moment take the homesick Parisian back to his native boulevards, or at the "Sportsman," where the American is beguiled from his nostalgia not only by Sousa's marches, but by biograph pictures of steeple-chasers and Oriental dancers, or Monsch's Restaurant, which specializes in the Briton's needs—where, with a look of acute understanding, the head waiter will permit the guest to select his own English mutton chop or steak from the glass-doored ice chest.

The outdoor café life is not as well known, so narrow are the streets; even Calle Florida, which is the essentially fashionable street of the central town, is lamentably narrow. With the exception of the stately Avenida de Mayo, running from the Plaza containing the Cathedral and government building to the new chambers of Congress, and the Avenida Alvear, leading from the main part of the city to Palermo Park, flanked with costly homes and inter-

spersed with gardens and plazas that lend a wealth of verdure and flowers to the broad avenue, the streets are so narrow that in the business section vehicles are required by city ordinances to move in the same direction, down one street and up the next.

Buenos Aires is not a city that calls for the usual precautions taken by travellers. All the creature comforts may be had here, although, it must be confessed, at a cost greatly in excess of prices familiar to North Americans. There are good physicians and dentists, and no less than sixteen hospitals, one of which, the British Hospital, is a magnificently equipped institution, and the one patronized by the American colony. There are modern asylums, foundlings' homes, orphanages, etc., electric street cars (which carried 125,000,000 passengers last year), splendid trains that carry passengers, in thoroughly modern and well served coaches to almost every part of the settled country, carriages, taxicabs, hotels, department stores and shops, and, appropriately bringing up the end of the procession of the capital's accommodations, the Ricoleta Cemetery, the fashionable burying ground, where the exhausted Porteños are finally laid to rest in miniature mortuary palaces of marble and much stained glass.

Leaving the capital for a general tour through Argentina, the visitor will soon come to appreciate the Porteño's division of the republic into the two parts: Buenos Aires and El Campo. For the greater part, the Camp is a vast plain, covering five hundred million acres of flat, fertile soil, with scarcely a natural hillock higher than those thrown up by the ants, and no depression more marked than those which the cartwheels have ploughed—stretching from horizon to horizon, north, west and south, vast, silent and awe-inspiring in the majesty of its enormous productiveness—the calm, inexhaustible bosom which suckles the prodigious infant on the Plata.

These pampas are the homes of the estancieros, the



Guanacos in the Zoological Gardens, Buenos Aires.

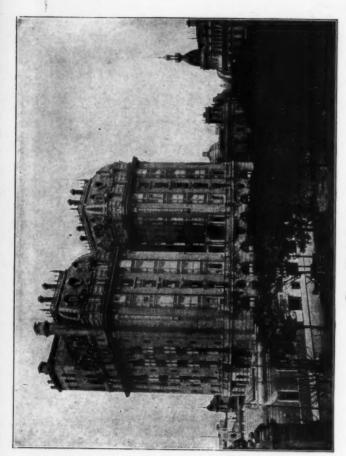
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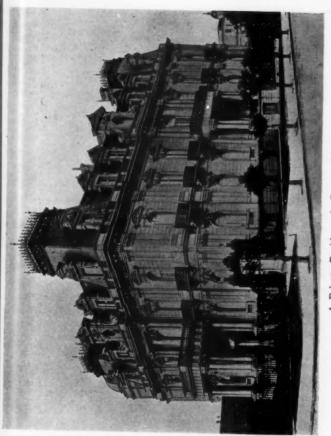
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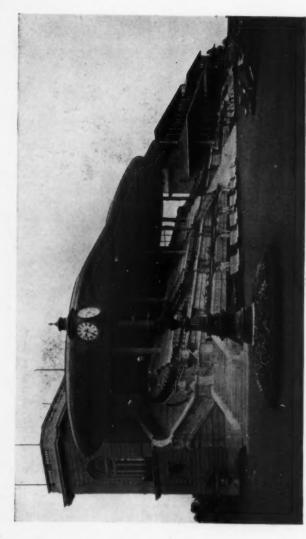
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Plaza Hotel-Buenos Aires.



A Private Residence in Buenos Aires.



Jockey Club's grandstand at the race track-Buenos Aires.

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name given to the planters and masters of the great breeding ranches, some of whom possess estancias feudal in extent; one, indeed, in Patagonia, is as large as the State of Rhode Island. Their homes and outbuildings are about the only objects that give a human touch to the mile upon mile of green maize and golden wheat, of purple alfalfa and vivid blue linseed flower, unless one comes upon the black mud hut of the colono, or small farmer who works the field on shares. An occasional clump of man-planted trees may also be met with, and on the fringe of the pampas are a few widely scattered Indian settlements; but there is little to modify the metaphor of the ocean so universally used to describe these almost limitless plains. Even the seagulls sweep inland for hundreds of miles to add to its effectiveness. When the very heart of the country is reached, the traveller may scan the horizon from every point of the compass and know that in every direction that which lies beyond is exactly the same.

The seasons, which are much like our own, although exactly the reverse in their occurrence, bring their appropriate activities. During the busy harvest period the Camp takes on an aspect of bustle which convinces the traveller that this great business republic has cast the word "mañana" forever from its "bright lexicon of youth." Harvesting machines cutting a swath, not four or six, but fourteen feet in width through the wheat fields, threshers with powerful blasts that pile the straw in great stacks, and on the ranches the great armies of horned cattle add the convincing touch to the scene of prosperity.

With the cattle rides the gaucho, the cowboy of the pampas. Dressed in smart poncho, and bright-hued zombachos, or wide Turkish trousers, tight fitting boots and sombrero, and sitting astride his saddle richly ornamented with silver, he presents a sight worth seeing. To the gaucho the Camp is indebted for its only romance and picturesqueness; he has given to it its songs and tales of adventure, its

tragedies and the brightness of its life. Lithe and graceful, he is a consummate horseman and rivals his Texan counterpart in feats of horsemanship and skill with the lasso. He is proud, simple-minded and faithful in his friendships, but when aroused to anger by a slight or by deceit, he is as elemental in his vengefulness as the early types of his race who ranged the pampas during the so-called medieval period of Argentine history. Needless to say, he has contributed his quota in the wars of the republic and has furnished the inspiration for many a stirring drama in the literature of his country.

The story of the pampas and the life and habits of their workers and of the denizens nature has sent to share in their richness, has been told by many writers of our day, notably by W. H. Koebel, an Englishman, in his recently published "Modern Argentina." It is the story of a great country and a great business enterprise that is fast spreading its activity farther and farther north, west and south—to the north, towards the still savage Chaco country and the mountainous provinces of Jujuy, Salta and Catamarca; to the west, towards the Andean uplands, and southward to the Federal Territories in the region that was once referred to on the maps as Patagonia. Gradually the cattle ranch is being pushed farther afield to give way to agriculture, while the ranch men in their turn are penetrating the field of the timber industry.

There is practically no village life in Argentina; there is no middle class between the lordly estanciero and the laborer. The very necessary element of the small farmer, working his own independent property is gradually being introduced, as the owners of the great estates are beginning to subdivide their holdings. When this new element is thoroughly absorbed into the commonwealth, and the nation acquires a "volk," the prosperity of Argentina will be assured for all time. The development of the country is still in its infancy; for years to come there will be room for an increasing influx of capital and men who can take

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part in the most modern and greatest wealth-producing enterprise on the globe. So far the English and Germans are the chief among the foreign capitalists who have sought out this present-day El Dorado. The better acquaintances with Argentina and the other countries to the south of us, so intelligently and industriously fostered by the Pan American Union at Washington, will, it is to be hoped, induce a North American invasion of Argentina, an invasion that will be more than welcomed by the "Yankis" of the South.

The traveller who takes the seven hundred mile journey westward through the Camp, luxuriously housed in the coaches of the Great Western Railroad, comes upon a different scene and a different life when he reaches the ancient city of Mendoza in the foothills of the Andes. Here it was that San Martín recruited and organized his Army of Liberation, the army with which, emerging suddenly from its isolated hiding place, he startled the world by his crossing of the Andes to fall upon the unsuspecting Spanish—a feat of arms unsurpassed by the famous crossing of the Alps by Napoleon.

Mendoza is now the center of the wine and fruit industry of Argentina. The development of the former is in keeping with the phenomenal progress of the rest of the country. Although the great bulk of the product is not of the highest quality, the presses turn out each year enormous quantities that bear the labels of Bordeaux, Burgundy, Moselle and Muscatel, produced from the very best imported vines. Other fruits have been found to grow equally well in this section: peaches, pears and plums reach a high state of culture, while apples, quinces and cherries do very well. It is the boast of the Argentino that his country is capable of producing every conceivable kind of fruit, and it is not an idle boast.

At this point—Mendoza—a change of car is made to the less comfortable narrow gauge road which takes the traveller through the fastnesses of the Andes. The route leads first through the peach orchards and vineyards, with the snow peaks easily distinguishable in the background. The Mendoza river, fed by the melting snows, tumbles along its way and is crossed and re-crossed many times en route. Distant about one hundred miles, one comes to the Puente del Inca, the famous natural bridge spanning a chasm one hundred and fifty feet in width, about which are many native legends of Incarial times, for the bridge formed part of the great system of roads built by the Incas.

A little farther on, still mounting to a higher altitude, the station of Las Cuevas is reached, the last stop in Argentine Territory and the entrance to the tunnel under the mountains, an engineering feat deserving of a chapter by itself. The elevation here is in excess of ten thousand feet, and the scene one of impressive grandeur, fascinating in the kaleidoscope of color that floods the gorges and the giant peaks.

Nearby, at the Cumbre (top of Uspallata Pass), if one forsakes the comforts of the passenger coach for mule-back, he can view the now world famous "Christ of the Andes," a bronze figure of the Prince of Peace rising to a height of twenty-six feet above its massive granite pedestal\*. It was erected to commemorate the peace treaty that brought to an end the long continued differences between Chile and Argentina. Growing out of the boundary dispute, this controversy had grown more and more acute as the long neglected Patagonian territory increased in promise. The boundary, finally fixed, in 1902, by Sir Thomas Holdich's commission, runs along the summit of the Andean peaks. On the base of the monument a tablet bears the words:

"Sooner shall these mountains crumble to dust than the people of Argentina and Chile break the peace to which they have pledged themselves at the feet of Christ the Redeemer."

From Carácoles, the Chilean terminus of the tunnel, the Transandino-Chileno carries the traveller to the station

<sup>\*</sup>See headpiece of this series.

of Los Andes. From here to the port city of Valparaiso, Chile, the route is over the Chilean State Railroad, which is of standard gauge and passes through some rich and fertile valleys on its way towards the Pacific.

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Once in the Valley of Las Cuevas the traveller is in the very heart of the Cordilleras (ridges) of the Andes. He is near the home of the giants of the Western Hemisphere—mighty Aconcagua, rising to a height of 24,760 feet, and his almost equally lofty fellows, Mercaderio, Tupungato, and, on the Chilean side, Juncal, Polero, Navarro and Maipo. Towards the south the peaks diminish somewhat, although to the very point of the continent at Cape Horn, the huge backbone or main cordillera continues its course in all its majesty; in its lower courses, below Valdivia (in Chile), the western cordillera reaches in sheer descent to the sea, breaking up into a long series of islands, channels and awe-inspiring fjords surpassing those of Norway in grandeur.

To the east of the Cordilleras, and south of the river Negro, stretches the territory long known as Patagonia, first in swelling plateaus and then flattening out into the level pampas that are now the scene of Argentina's advancing sheep industry. For Patagonia, east of the Andean summits, and the east half of Tierra del Fuego were awarded to Argentina by the boundary arbitrator, King Edward VII, following the report of Sir Thomas Holdich's commission, and is now divided into the Federal Territories of Rio Negro, Chubut and Santa Cruz. The land of Patagonia, so named by the early explorers from the big feet (pata goas) of the aboriginal Tehuelche Indians, is now reached by steamer to Punta Arenas in Magellan Strait, the southernmost city on the globe, for the railways of Argentina have not yet penetrated this country to any considerable extent. In climate it ranges from the temperate to the extreme cold of northern Michigan in the winter months. From the time of Darwin who first took the country out of the category of terras incognites, Patagonia has lost most of its mystery and is now being settled by the diverted immigration from Buenos Aires. The Scots, English and Germans have taken up large allotments of land, and many New Zealand sheep men have come over to add their skill to the leading industry of sheep-raising. There are also colonies of Boers and Jews.

The Fuegian Archipelago at the southern extremity of South America covers a territory as large as Nebraska. A tortuous, wind-swept labyrinth of waterways separates the hundreds of islands that constitute this group. They are no doubt formed by the submerging of the lower end of the Andes. When the land sank these stormy waters beat through the valleys and chiseled the cliffs into incongruous shapes that added much to the terrors of the early navigators. This country is not at all a desolate mass of snew and ice, as popularly supposed. There are thickly wooded slopes and plains covered during four months of the year with succulent grasses. The largest of the group of islands is Tierra del Fuego, half as large as Illinois. It is divided longitudinally between Chile and Argentina, by far the larger and more valuable portion of the archipelago having been awarded to the former by the Royal Arbitrator. The name was given to the archipelago by Magellan when he saw the trails of smoke from the signal fires of the natives who followed his epoch-making course through the strait that now bears his name. Very little of the Fuegian country is under cultivation, although thousands of sheep graze over its rich valleys and verdant plains. The southernmost point, Cape Horn (in Chilean territory), is a monster rock, bleak and forbidding, against which the antarctic storms beat with such terriffic force that it has become the headstone of the mariners' most populous graveyard.

A vastly different scene awaits the traveller who penetrates into the tropical wilds of the northern Territories of diigid, dd

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Argentina. Going aboard one of the fine steamers of Nicholas Mihanovitch-the king of the river traffic-at Buenos Aires, the traveller follows the course of the Paraná, which is the main water highway of Argentina. The trip will take him through the richest provinces of the Camp, past the busy miniature of Buenos Aires, the city of Rosario, which is the port of shipment for the grain of this region, and up into the tropical scenery and mystery of the Chaco and Misiones Territories, opening up vistas of prodigious natural growths and riotous beauty differing in every way from the sombre majesty of the Fuegian country. The Chaco, and the Territory of Formosa, adjoining it on the north, are still almost wholly given over to the uncivilized Indians. Up to the present time this region has been exploited chiefly for the wood of the quebracho (quiebra-hacha-axe-breaker) tree which yields the best quality of tannin and timber for railroad ties; it is richer in the former product than any tree yet discovered.

The picturesqueness of the Paraná river scenery along its upper courses has excited enthusiastic descriptions from all the travellers who have penetrated this marvelous country. A thousand miles up the river, in Misiones, near the point where Argentina, Paraguay and Brazil meet, are located the famous Iguazú Falls. The great cascade fifty feet higher and with a lateral extent 1,250 feet greater than Niagara, lies in the midst of a primeval forest. The enormous volume of water bursts through a series of thickly wooded islands with a roar that is all the more impressive to the spectator because of the solitude that reigns throughout this scantily populated region. The hand of man has done nothing here—no attempt has been made to harness the mighty power; nature has been left alone to revel in utter abandon.

For comprehensive information in regard to travel routes, steamer and railroad service, hotels, money, gratuities, climate, clothing, customs and port regulations, the reader is referred to the following sources:

Alvea Aveni Bahia Calle Canga Cap ( Carac Carac Catan Chacc

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"Practical Guide to Latin America. Preparation, Cost, Routes, Sight-Seeing," by Albert Hale. Boston, Small, Maynard & Co., 1909. The travellers' notes in "The South Americans," by the same

nthor

"Travel Conditions in South America," by Professor William R. Shepherd, published at pages 1004-1038 of the Pan American Bulletin for May, 1908.

The reader's inquiries will also be cheerfully answered by the

Pan American Union, Washington, D. C.

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Modern Argentina. By W. H. Koebel. \$5.00. The Country of the King's Award. By Sir Thomas H. Holdich. \$6.40. Argentine Year Book. Argentina and Her People of To-Day. By Nevin O. Winter. The South Americans. By Albert Hale. \$2.50 net. Postage 18c. Practical Guide to Latin-America. By Albert Hale. \$1.00 net. The Other Americans. By Arthur Ruhl. \$2.00 protected net. Argentina. By W. A. Hirst. The Argentine Republic. By A. Stuart Pennington.

### PRONOUNCING VOCABULARY

Words whose pronounciation is easy or can be found easily or has been given in previous issues of the Reading Journey are not listed.

Alvear Avenida de Mayo

Bahia Blanca Calle Florida Cangallo Cap Frio Caracoles Catamarca Chaco Club de Residentes Estranjeros colono Cumbre Cuyo duenas Esmeralda estancias estancieros Formosa

gaucho

guaru

La Plata

Mercaderio

ujuy uncal a Cuevas

Maipo

Abl-vee-ahr' Ah-vay-nee'-dah day Mah'-ee-yoh Bah-ee'-ah Bla'hn-kah Kah'-yay Floh-ree'-dah Kahn-gah'-yoh Kahp Free'-oh Kaap Ohr-tee-gahl' Kah-rah'-koh-lays Kah-tah-mahr'-kah Chah'-koh Choo-boot' day Ray-say-dayn'-tays Ays-trahn-hay'-rohs koh-loh'-noh Koom'-bray Kuh'-yoh doo-ayn'-yahs Ays-may-rahl'-dah ays-tahn'-see-ahs ays-tahn-see-ay'-rohs gow'-choh Ec-gwah-zoo' Hoo-hoo'-ee Hoon-kahl' Lahs Kooh-ay'-vahs Lah Plah'-tah Mah'-ee-poh Mayr-kah-day'-ree-oh

Missiones Mitre, Bartalome

Navarro
Pata goas
Patagonia
patios
Polero
pampas
poncho
Puente del Inca

Punta Arenas l'orteno Puyrredon' quebracho quiebra-hacha Ricoleta Rio Negro Rosario Rivadavia San Martin' Sarmiento senoritas sombrero Tchuelche Tierra del Fuego

Tupungato yerba mate zombachos

Mee-see-oh'-nays Mee-tray', Bahr-toh-loh-may' Nah-rah'-roh Pah'-tah goh'-ahs Pah-tah-goh'-nee-ah pah'-ree-ohs Poh-lay'-roh pahm'-pahs pohn'-tcho Poc-ayn'-tay dayl En'-kah Poon'-tah Ah-ray'-nahs Pohr-tayn'-yoh Poo-ee-ray-dohn' kay-brah'-choh kee-ay'-brah ah'-cha Ree-koh-lay'-tah Ree'-oh Nay'-groh Roh-sah'-ree-oh Ree-vah-dah'-vee-ah Sahn Mahr-teen' Sahr-mee-ayn'-toh sayn-yoh-ree'-tahs sohm-bray'-roh Tay-wayl'-chay Tee-ay'-rah dayl Foo-ay'-goh Tco-poon-gah'-toh yayr'-bah mah-tay'

sohm-bah'-chohs



## IV. Mechanical Refrigeration'

Carl S. Dow

S OME of the work of the engineer is like electricity—known only by the effect it produces. For instance, few people have the slightest conception of the method of making artificial ice. Many know that rooms are cooled almost to the freezing point without ice, but they do not know how it is done. It doubtless is a great mystery how cold and even ice is produced with machinery or apparatus having a temperature not lower than normal. In fact the temperature of the machinery (usually steam) is decidedly above normal.

Since about 1875 the freezing process has been used for the preservation of perishable products, such as meat, fish, fruit, etc. At first natural ice was used, but with a machine lower temperatures can be had and the temperatures can be more easily regulated. To mechanical refrigeration the packing houses owe their extensive trade; without it products could not be turned out so rapidly, nor could they be shipped to all parts of the globe. Go into a large market and you will find a low temperature, low enough to keep meat, but you will find no ice. You may see snow on a lot of pipes but it is not the snow that cools the room, and snow is merely moisture from the air condensed and frozen. Hospitals, restaurants, candy factories

<sup>\*</sup>The first article of this series is entitled "Engineers and Engineering" and appeared in the September, 1911, Chautauquan. It was followed in October by "The Steam Engine" and in November by "Heating Houses and Public Buildings."

also employ mechanical refrigeration because it maintains a lower temperature in the cooler which is drier and more sanitary than when ice is used.

Large residences and country clubs are often so situated that it is difficult to obtain natural ice, while electric power is available because used for lighting. Under such conditions a motor-driven machine may be used for cooling the refrigerator, the average servant having sufficient knowledge to throw a switch, see that the condenser water is running, that the bearings are oiled, and that there is plenty of ammonia in the system.

In breweries, the heat developed in the process of fermentation of the wort is removed by refrigeration—about one ton of refrigeration being required in the production of twenty-five barrels of beer. Later in the process the beer is cooled artificially instead of with shallow trays of ice floating on the surface, as was the custom.

Still another use for mechanically-produced cold is the making of ice in the skating rink. Both New York City and Boston have large rinks, in which a fine ice surface can be had at any time, permitting such games as hockey to be played on schedule regardless of weather conditions.

The making of artificial ice is perhaps the refrigerating machine's most evident product. The day is not far distant when the purer artificial ice will almost everywhere displace natural ice even as it does now in some cities and localities where it is cheaper to operate a refrigerating machine than to harvest and store natural ice. Aside from relative costs, the artificial ice is much to be preferred from a hygienic standpoint because it can be freed from impurities. Natural ice, on the other hand, retains all the bacteria originally in the water and many bacteria are not killed by the cold as is commonly supposed.

Electric light stations, having but little to do in the summer season, are in a particularly favorable position to manufacture ice and when this practice has become more common, it will not be as necessary to pay attention to the complaints of the natural-ice man. The central stations have boilers to spare in summer, and interest and depreciation charges go on just the same as though they had a "full load." Furthermore almost as many men are necessary in summer, because of the diversity of labor that must be employed whether or not they can be kept busy all the time. These men could just as well operate refrigerating machinery, either for cold storage or the production of ice. The central station thus solves the problem of increasing its income in the summer season and extends to the small town the conveniences of cheap cold storage.

Cold may be produced by chemical action, a process familiar to every one in the ice-cream freezer. Salt mixed with shaved ice or snow causes the ice to melt rapidly and the melting ice absorbs heat from the warmer bodies in contact with it. Some people do not shave the ice very fine thinking to economize, but the finer the ice the quicker it will melt and the faster it will absorb heat. Other substances have similiar action—water and other liquids may be cooled by melting saltpeter. History says that as early as 1550 a physician in Rome utilized saltpeter for this purpose. In place of salt, calcium chloride or ammonium nitrate can be used.

Cold may also be produced by the evaporation of liquids. The rapid evaporation of ether produces a sensation of cold on the skin. Water in evaporating absorbs heat. It is said that the natives of India made ice on cool nights by placing shallow dishes containing water in a place where the breezes would blow past them; the evaporation of a little water absorbed heat from that remaining. "Physics" explains how substances absorb a certain amount of heat, (latent) not shown on a thermometer, when they change from liquid to gaseous form.

The third and most important way of producing cold is by the expansion of a volatile liquid, ammonia being the the

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most used. Liquid ammonia must not be confused with the ammonia water purchased at the drug store. Liquid ammonia, or pure ammonia, contains no water while the ammonia used about the house is simply water holding in solution a small percentage of ammonia gas.

Suppose a dish containing water is placed on a piece of red-hot iron; the temperature of the water rises to 212 degrees, then the water evaporates, or vaporizes; that is, it changes from a liquid to a gas. While this process is going on the vaporizing water absorbs heat from the iron, and in absorbing heat cools it. This is the principle used in mechanical refrigeration, except of course, the vaporizing water would not cool anything below 212 degrees. In this respect it is valueless as a refrigerant. But ammonia changes from liquid to gas (or boils) at 28 degrees below zero or 60 degrees below the freezing point of water. Therefore to mechanically cool a substance it is only necessary to place it in contact with vaporizing ammonia.

How simple the process really is. A room may be cooled by allowing liquid ammonia to vaporize in pipes within it, the gas passing off to the air outside. If ammonia or any other volatile liquid having a sufficiently low boiling point were cheap enough, this is all there would be to mechanical refrigeration—the complex system with its expensive machinery would be reduced to a simple evaporator, a tank for the liquid, and a valve for regulating the amount used. But a sufficiently cheap volatile liquid is not known to engineers, and the only way to make ammonia refrigeration possible commercially is to recover the gas, keep it in the system, and use it again and again.

To put the gas arising from the vaporizing ammonia into condition to be used again (liquid) is the duty of the compressor pump and the condenser. Ammonia, at atmospheric pressure, changes from liquid to gas at 28 degrees below zero, as we have said. Therefore to get the gas back to the liquid it would have to be reduced to this low tem-

perature, impossible from a commercial view point. If, however, the gas is compressed, a less reduction in temperature is necessary—compressed to 150 pounds per square inch (which is not at all difficult) the temperature need be reduced to only about 85 degrees, readily obtained with water at 50 to 60 degrees. With a pressure of 200 pounds the temperature reduction is still less, 100 degrees representing the liquefaction temperature.

There is a law of "Physics" which states that while passing from a liquid to a gas, a substance absorbs a certain amount of heat which will be thrown off when the gas is again liquefied. In other words, to turn the compressed gas into liquid the latent heat must be extracted from it. Still more heat than that latent must be taken from it because the gas is heated by absorbing heat while doing refrigerating duty. To take this heat from the compressed gas, it is passed through a condenser which is simply a bank of pipes over which water flows.

The third essential process following compression and condensation, is expansion. The gas liquefied in the condenser, is allowed to pass through a valve into the pipes forming the expansion coils. The liquid, under pressure previous to passing the expansion valve, now flashes into gaseous form and in changing from liquid to gas must absorb a quantity of heat equal to its latent heat and this heat comes from the surrounding objects. In this way the piping is made very cold, cooling any object, air or liquid, brought in contact with it. The expanding gas absorbs heat, becomes warm, and is drawn into the compressor to go through the operations again.

To apply the refrigerating effect is the next step. There are two general methods, similar to heating—the direct and the indirect. In the former, called the direct-expansion system, the ammonia is piped to the objects to be cooled and accomplishes refrigeration by direct contact.

The "indirect method" is another name for the brine

system. Brine, a solution of salt and water, is reduced in temperature by passing through pipes surrounded by evaporating ammonia, or surrounding pipes in which ammonia is being evaporated. In either case the temperature is quite low, somewhere between 32 degrees and zero. Circulated through the room to be cooled the cold brine absorbs the heat from the atmosphere surrounding the pipes. "Physics" has taught us that water is of high specific heat, that is, a pound of water is capable of storing a large number of "heat" units, or "cold" units. For this reason a pound of cold brine will "carry off" a large amount of heat.

For moderately low temperatures, salt brine is used; that is, common salt and water; it will not freeze until its temperature is lowered to about zero. But for low temperatures chloride of calcium brine is preferable because there is no danger of its freezing and bursting the pipes. When of proper density chloride of calcium brine will not freeze until subjected to a temperature of about 54 degrees below zero, or 82 degrees below the freezing point of water.

The compression system of refrigeration requires an engine-driven or a motor-driven compressor, or gas pump, which, operating under considerable pressure as regards steam and ammonia gas, must be watched for leaks, and attended to like any other moving machine. But there is another method of obtaining refrigeration which does not require a compressor. Strictly speaking, this system, called the "absorption" system uses apparatus not machines, for the parts are stationary—they do not transmit power.

In the absorption system, expanding ammonia cools apartments, or brine, or makes ice exactly as in the compression system; the difference lies in the way of turning the warm ammonia gas into liquid. Another difference is in the ammonia, which is aqua ammonia the same you buy in the drug store, only stronger. Few people realize what a strong attraction water and ammonia have for each other. Water will absorb 700 times its volume of ammonia gas

when at 50 degrees and 460 times its volume at 100 degrees.

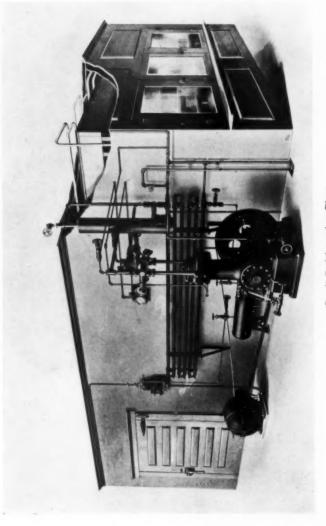
When an uncorked bottle of water is placed on the stove, steam forms and is driven off. If the cork be firmly fixed in place the steam will increase in pressure until either the cork is blown out or the bottle bursts. If, however, a tube is put through the cork, and led to a coil over which water flows, the steam condenses—in other words we have a still.

The action with aqua ammonia is similar. Heated in a bottle, ammonia gas is driven off. With a pipe through the cork the ammonia gas will be driven off under pressure and will pass to a coil and be condensed. But, the ammonia gas would have to be under considerable pressure else it would not condense with moderately warm water.

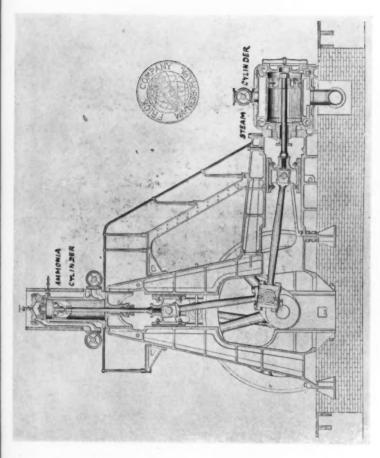
Returning to the bottle: after some ammonia gas has been driven off and condensed, weak aqua ammonia will be left in the bottle. If cooled it can again be charged with ammonia gas for cold water will absorb more ammonia than will warm water. The bottle of ammonia with the tube leading to the coil show all the elements of the absorption system of refrigeration. The bottle when heated is the generator, for it generates pressure; it is the absorber when cooled and the weak liquor is made to take up more ammonia gas. The coil is the condenser.

In a practical absorption plant, other devices are used, not to introduce any new feature, but to make the process more efficient. For instance, there is the rectifier, in which the water is taken from the gas driven off in the generator. The generator is heated by either live or exhaust steam, the latter showing remarkably good results when conditions are right. The weak liquor is given more ammonia gas by means of a perforated pipe from which the ammonia escapes into the water of the absorber.

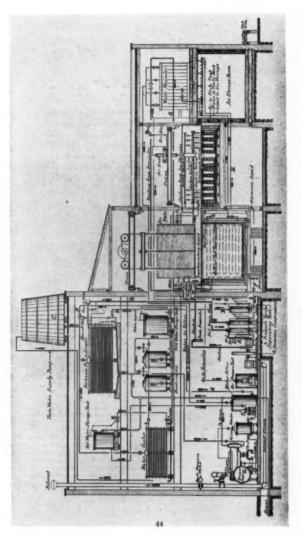
Practically all ice now produced artificially is made by either the can system or the plate system. Can ice is made by immersing cans of water in tanks containing brine which



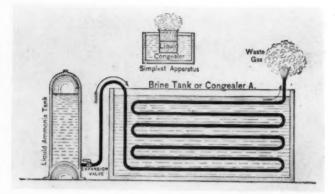
Small Refrigerating Plant. Cold Storage Box for Butchers, Dairymen, Restaurants, etc. "York" motor-driven, single-acting compressor.



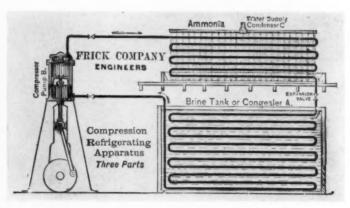
Section of Ammonia Compression Refrigerating Machine.



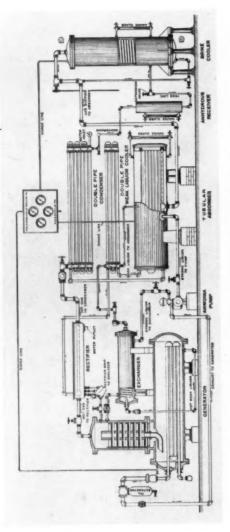
Combined Plate and Can Ice Plant. Ammonia Absorption System.



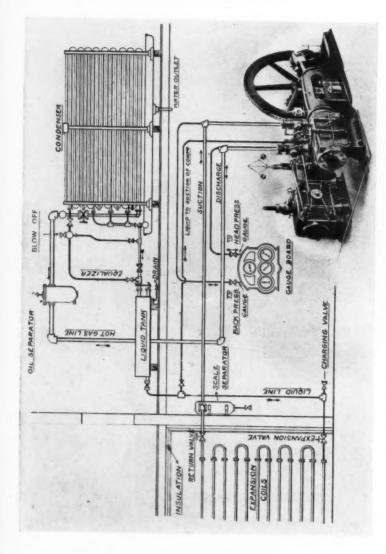
Simplest Form of Refrigerating Machine.



Compression System.



Ammonia Absorption System of Refrigeration.



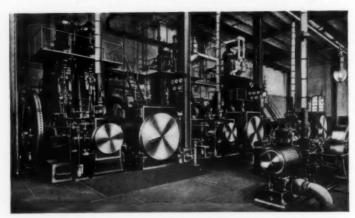
General Arrangement of Refrigerating Plant. Ammonia Compression System.



Game Freezing Room.
Cooled by "Frick" Refrigeration Machinery.



The Product of the Plate Ice Plant.



Engine Room of the Largest Ice Plant in the World.

has been cooled to about 14 degrees. The cold brine absorbs the heat in the water, reducing the temperature to 32 degrees, then, taking the latent heat, converts it into ice. The ice forms quite rapidly because the brine acts on five sides of a relatively small body of water. When frozen solid, the can is withdrawn from the brine tank by a hoist or crane and sprayed with hot water to loosen the cake which slides by gravity to the ice storage room.

It is evident that the impurities in water will be frozen into the ice. The purity of ice is not shown by its transparency—impure ice may be almost entirely transparent, while pure ice may be white or opaque because of small bubbles of air. To produce pure, transparent ice air and impurities are removed by distilling the water, the usual method being to condense the exhaust steam from the engine which drives the compressor. The steam is first passed through a grease extractor which takes out of it most of the lubricating oil. It then goes to a condenser, and then to a reboiler and skimmer. After all this purification, the water stays in a storage tank until cool. A charcoal filter or deodorizer is the final apparatus to handle the water before freezing. After the air and other gases have been driven off in the reboiler, the water is not allowed to come again in contact with the air which separates out while freezing, forming small bubbles. Another reason for keeping the air from the distilled water is that distilled water in contact with air causes iron to corrode rapidly; the dissolved iron discolors the ice.

The plate system of making artificial ice is more often used when a large supply of pure water is available. The expensive distilling apparatus is not used—it would be impossible to keep air from the water in this process. The ice is rendered reasonably free from air bubbles by agitating the water while freezing, a process which forcibly dislodges the air which collects on the freezing surfaces.

Plate ice is made by immersing in the water to be frozen plates bolted to pipe coils cooled either by the direct expansion of ammonia or by a current of cold brine. The low temperature maintained transfers the heat in the water to the coils which circulate the refrigerating substance until the ice accumulates on the plate to a thickness of twelve to fourteen inches. Hot brine or warm ammonia is then circulated in the coils until the ice loosens and falls from the plate. The plate of ice is then hoisted out of the tank and sawed into blocks of the desired size.

We often hear an ice or refrigeration machine spoken of as being a 10-ton or a 50-ton machine. This means that a 10-ton refrigerating machine will give the same refrigerating effect for twenty-four hours that will be obtained from the melting of ten tons of ice in the same time. If, however, the machine is said to have twenty tons ice making capacity the meaning is clear.

Ice-making capacity and refrigerating capacity are not just the same. Usually a machine having one ton refrigerating capacity would produce only about one-half ton of ice, because the water supplied to it would not be at the freezing point; in warm weather it would be from 70 to 90 degrees.

Refrigerating capacity is equal to 284,000 heat units per ton, for the latent heat of ice is 142 heat units per pound, and 2000 times 142 equals 284,000. To get the ice-making capacity when the water is supplied at 80 degrees, we proceed as follows: 80 minus 32 equal 48 equal the number of degrees the water must be cooled before freezing commences. 142 plus 48 equal 190 equal heat (or cold) units transferred per pound. And 284,000 divided by 192 equal 1,494 pounds. The machine having a refrigerating capacity of one ton would produce 1,494 pounds of ice under these conditions of temperature. But this is approximate only; it would be reduced if losses and wastage for thawing out moulds were considered.

SEARCH AND REVIEW QUESTIONS ON THE REQUIRED READING WILL BE FOUND IN THE ROUND TABLE SECTION AT THE BACK OF THE MAGAZINE.

(End of C. L. S. C. Required Reading, Pages 25-94.)

## The Latest in Government

Arthur E. Bestor

Director Chautauqua Institution

T HE American democracy is on such a large scale, has such extended suffrage and is so directly governed by the masses that it is the most interesting democratic government which has ever been undertaken. The complexity and interdependence of modern life give rise to many economic, social and political experiments which are being worked out rapidly before our eyes.

In attempting to give some idea of the latest developments in government, one finds it necessary at once to limit the subject. There are national policies which present new developments in the matter of the extension of federal power, such as the regulation of corporations, the reclamation of arid lands, the conservation of forest and water rights and the administration of the pure food law. The annual conference of governors is a most useful and unique agency for securing uniform legislation and guarding against an undue exercise of the control of the national government. There are certain improvements in our municipal affairs such as the uniform systems of municipal accounting now required by several states; the use of the referendum with respect to bond issues, franchises and other local problems; and commission government. We are moving so fast in all our political experiments that it is extremely difficult to point out what is most significant. By reason of popular interest, we shall confine ourselves to one phase of municipal development, namely, the commission form of government, and shall devote our attention largely to those experiments in state governments which are generally the battleground for "standpatters" and "insurgents."

The balance between the power of the state and individual liberty is always changing because of the necessity for new adjustment to new conditions. Take a single illustration, the railroads, where both the federal and the state governments have extended control tremendously in the last decade. Many states have railroad or public service commissions, which have power to make valuation of the property, compel repairs and improve service, supervise the business of the corporation through reports, enforce uniform charges for short and long hauls and approve all bond issues. Two-cent fare laws, anti-pass laws and much other legislation show how far we have gone in control over quasi-public corporations.

That there has been in the last ten or fifteen years a decided tendency toward more direct control of the government is evident to all. Mr. E. L. Godkin in 1808 in his very suggestive book on "Unforeseen Tendencies of Democracy" said: "The representative system after a century of existence under a very extended suffrage has failed to satisfy the expectations of its earlier promoters and is likely to make way in its turn for the more direct action of the people on the most important questions of government." It is now possible for us to trace this progress toward more direct participation through the establishment of the secret ballot, through the demand for state-wide and state-controlled direct primaries, through limitations upon campaign expenditures, and now in these days through the struggle for the initiative, referendum, recall and the commission form of government. Fundamentally, it is a question of where the power of ultimate control in the state shall be lodged. The contest is between those who would restrict and those who would extend the influence of the people. Sovereignty of the people means that the will of the majority must be the ultimate source of authority, which the advocates of these reforms insist can only be achieved through direct action.

The securing of proper officers is one of the most serious problems of any government. No law will administer itself. Because of the lack of interest on the part of the electorate, the need of a politician devoting himself almost exclusively to politics and the danger of vested interests controlling public officers the matter of nominations is extremely difficult. The growth in the United States has been through the personal offering for election of the candidate himself, the nomination by committees and by Congress, the nominating convention which has come almost completely under the control of the political machine, and now through the direct primary. In certain local units like the county, there has always been in the United States a primary, but this was purely a local affair, and not controlled by law. The direct primary has now become a part of the government and is established by statute in twenty northern states and in Louisiana. In general, it provides that sixty days before the election a primary shall be held for all parties, at which candidates, put upon the ballot by petition, are selected by a plurality of votes as the party candidates. In ten of the southern states there is an optional primary under the control of the party committees and almost exclusively used by the dominant party because of the expense. Over two-thirds, therefore, of the states have the direct primary in active operation, and its establishment in all states cannot be long delayed.

There are certain problems connected with direct nominations at primary elections which are receiving attention. The convention, of course, made up the party platform, which is likely hereafter to emanate more directly from the utterances of candidates. Wisconsin provides

for a candidates' convention, made up of all candidates for state offices and for the legislature and hold-over senators, which formulates the party platform. It is hard to make an effective test of party allegiance for those who desire to vote in the primary. An expression of intention to support the party candidates at the next election, a decision by party officers and party registration lists have been the various attempts to limit the primary to those who have the right to vote. It can be said in general, however, that the direct primary will minimize the importance of the party machine, and will mark a clear distinction between state and federal politics.

The interesting development of direct primaries has to do with the effort to secure popular election of United States senators. There can be no question that Congress will propose very soon a constitutional amendment for popular election. Indeed, the bill for it would doubtless have passed the Senate at the last regular session had the problem not been complicated by an amendment which provided for federal control of elections. The Oregon plan will not therefore have long the importance which it now has. It is the most successful attempt to compel candidates for the United States Senate to go before the people. Every candidate for the legislature in Oregon may subscribe to one of the two following statements, but if he does not subscribe, he is not debarred from the ballot. Statement No. 1 is as follows:

"I further state to the people of Oregon as well as to the people of my legislative district, that during my term of office, I will always vote for that candidate for United States senator in Congress who has received the highest number of the people's votes for that position at the general election next preceding the election of a senator in congress, without regard to my individual preference."

## Statement No. 2 is as follows:

"During my term of office I shall consider the vote for United States senator in congress as nothing more than a recommendation, which I shall be at liberty to wholly disregard if the reason for doing so seems to me to be sufficient."

The result is that now a conclusive popular vote is secured for United States senator, and in the election of 1908 Governor George E. Chamberlain, a Democrat, was elected by a Republican legislature, fifty-one members of which were subscribers to Statement No. 1. Not a single legislator, notwithstanding tremendous pressure, refused to abide by his pledge. No better illustration could possibly be found of the success of this plan than the election by a Republican legislature of a Democrat senator, because he had secured in the primaries a decisive victory over his Republican opponent. Nebraska, Nevada, Minnesota, New Jersey, Ohio, Kansas, California and Arkansas all provide for securing a popular vote upon United States senator, although an advisory vote is usually all that is secured. Oregon, Nebraska, New Jersey, North Dakota, and Wisconsin also provide for direct primaries to express the choice for President and Vice President and for the selection of delegates to national party conventions.

The limitation of campaign contributions was the next step after the direct primary toward popular control. This has received a tremendous impetus from investigation by the Senate of the Lorimer and Stephenson elections. In seven states publicity is required by law. In eighteen states there is a limitation on the amount which any candidate may spend in the primary and election and the restriction of corporation contributions. There is now a federal law on the subject. A complete and satisfactory Corrupt Practices Act will undoubtedly come in the near future, both in the federal government and in most of the states. Direct bribery was almost eliminated through the secret ballot. Indirect control by vested interests is made exceedingly difficult by publicity of campaign contributions and limitation of amounts.

The commission form of municipal government which is now authorized in twenty-seven states, and which is in operation or about to be put in operation in over sixty cities, had its opening in the city of Galveston after its destruction in 1900. Under the stress of that disaster and by reason of its experience similar to that of many other cities of bad municipal government, the commission plan was undertaken. It was frankly modeled on efficient corporation management and it was so successful that many cities took it up. What is known as the Des Moines Plan was enacted into a state law by the Iowa legislature in 1907, and made applicable to cities of over 25,000. It is really the Galveston plan revised, but for the sake of illustration will best serve our purposes.

According to this plan the council is made up of a mayor and four councilmen, who are vested with executive and legislature powers. There are five departments, each with a commissioner as follows: Public Affairs, Accounts and Finances, Public Safety, Streets and Public Improvements, Parks and Public property. These five officers are nominated at a non-partisan primary, where no party designation is used on the ballot, and elected biennially on a general ticket. All other officers and assistants are appointed and removed by council. The recall is provided for upon the demand of 25 per cent of the voters. The initiative and referendum are in full force. No measure can go into effect until ten days-after its passage, and the petition of 25 per cent of the voters requires a reconsideration and a submission to referendum. The publicity of all business is secured through the provision that all meetings, which are not attended exclusively by city officers, shall be open to the public. Monthly statements are published and each year there is an expert examination of all books and accounts.

The arguments which can be used against the commission form of government are those which are leveled against all direct legislation. It is claimed that there is no reviewing body and that representative government is sacrificed. In favor of the commission form of government are to be argued the benefits of responsibility and concentration. The council has a small number of members, ample power and full responsibility to the whole electorate of the city. The same body levies, collects and spends the money. The universal testimony in those cities that have undertaken the commission form of government is that it has been economical and efficient.

The campaign is on at the present moment in many states over the adoption of the initiative and referendum. The initiative is the power which the people reserve to propose laws and to enact or reject them independent of the legislature, while the referendum is the reservation of power to approve or reject any law passed by the legislature. It should be remembered that the referendum is a very old governmental device. The constitution of Massachusetts was submitted to a referendum in 1780, and Delaware is now the only state where the referendum is not required upon constitutional amendments. Practically every state constitution has an obligatory referendum on some special questions. Among such questions are the suffrage, state boundaries and annexations of territory, the location of the state capital and state institutions, taxation, sale of public lands, appropriations for public buildings, state aid to railroads and various problems connected with public credit.

The New England town meeting is an admirable illustration of direct legislation. Instructions were given to representatives by various town meetings frequently, which was a kind of initiative. Some states have enacted so-called Public Opinion bills, such as the Illinois law of 1901, which secures the will of the electorate on various public policies and is loosely called an advisory initiative. When, however, we speak of the initiative and referendum as policies of today, we refer rather to the example of Switzerland. All federal laws in that republic must be submitted to the people if the demand is made by 30,000 voters or by eight

cantons. The initiative may be invoked upon petition of 50,000 voters. All the cantons possess the initiative, and all except Freiburg have some form of referendum. It is to Switzerland that those who favor the initiative and referendum are most likely to turn to prove their contentions.

The Oregon plan, because it is the most complete and is furnishing the example for the most direct legislation of the present time, may be given in some detail. The constitutional provisions which provide for direct legislation are interesting. Article 4, Section 1, of the Oregon constitution was adopted in June, 1902, by a vote of 64,024 to 5,668, and provides that "the legislative authority of the state shall be vested in a legislative assembly, consisting of a senate and a house of representatives, but the people reserve to themselves power to propose laws and amendments to the constitution and to enact or reject the same at the polls independent of the legislative assembly, and also reserve power at their own option to approve or reject at the polls any act of the legislative assembly. . . . . The veto power of the governor shall not extend to measures referred to the people."

The initiative requires the signature upon petition of 8 per cent of the voters filed with the secretary of state four months before election. A referendum may be had upon petition of 5 per cent of the voters filed with the secretary of state not later than ninety days after adjournment of the legislature. An emergency clause may be attached to any law necessary for the immediate preservation of public peace, health or safety, and such laws are then not subject to referendum. In 1903 the Supreme Court of Oregon passed on these amendments and held that they did not abolish or destroy the representative form of government, and were simply provisions by which the people reserved to themselves a larger share of legislative power.

The states in which the initiative and referendum have been adopted as a constitutional amendment are Ore-

gon, Oklahoma, Nevada, Missouri, Montana, South Dakota, Colorado, Arkansas, Maine and California. It has been submitted by the legislatures, but not yet voted on in the following states: Washington, Wyoming, North Dakota, Nebraska, Florida, Idaho, and Wisconsin. There are over thirty states in which direct legislation in one form or another is already secured or in which active agitation is now going on. In twenty-five states the initiative or referendum or both are granted to certain cities. Texas has a useful provision in its primary election law, which forbids party platforms from endorsing proposed legislation that is not first voted upon at the primaries and endorsed by the people.

There are interesting differences between the operation of the initiative and referendum in various states. Some exempt constitutional amendments from operation of the initiative. In nearly all states specific exceptions are made to the use of direct legislation with respect to appropriations for the current expenses of the state governments, the maintenance of state institutions and the support of the public schools. Emergency clauses are everywhere provided for, but their use is restricted by requiring the legislature to vote by roll call and to furnish two-thirds or three-quarters majority for such emergency bills, or by limiting the legislation where the emergency clause may be used. The percentage of voters required varies from 5 to 15 per cent while the state of Maine requires a specific number. The basis of the percentage is either the vote cast at the last general election for Governor, justices of the Supreme Court or some other state officer. In some states the legislature may submit a competing bill to the one proposed by the initiative petition. North Dakota compels the legislature to enact or reject a bill within forty days. The frequent submission of defeated propositions is usually made difficult, as in Oklahoma, where rejected measures cannot be again proposed on the initiative within

ten years by less than 25 per cent of the electorate, or in North Dakota where the same constitutional amendment cannot be proposed oftener than once in ten years. Publicity is provided for under the Oregon plan through the publication of the text of the proposed law, and the distribution of argumentative pamphlets to every voter in the state, these pamphlets to be paid for at actual cost by the proponents and opponents of the law.

In general the initiative and the referendum are attacked on the following grounds. These devices have not been particularly successful in Switzerland, some contend, and they are not applicable to the system of government in the United States. Ours is a representative government, and while these measures may be used for local business questions they are not suitable for general legislation. The people ought to choose their representatives to consider and pass laws. The electorate cannot be trusted to vote intelligently upon complicated questions, and a great deal of legislation cannot be fairly left to a simple yes and no vote.

On the other hand, those who are pushing these reforms believe that they should be used in conjunction with, and not in place of, representative government. They give the people a veto on the actions of their officials and a weapon to force their will on unwilling or unresponsive representatives. The judgment of the whole community is better than any part of the community, and ought to be secured in a real democracy on important questions. The experience in the use of the initiative and referendum in Oregon and other Western states seems to be entirely satisfactory to the voters of these states. In 1910 in Oregon twenty-four measures were voted upon, sixteen of which were lost and only eight of which were approved. Those which were lost seem to have been administrative matters, which could better have been left to the action of public officials, while those which were carried were problems upon which the electorate could give a decision, and these latter brought out a large vote. A number of important questions have been settled satisfactorily in Oregon since the adoption of direct legislation in 1902.

The recall is the reform which has been the most before the people of the United States, on account of its applicability to judges in the Arizona Constitution. President Taft is very much opposed to the judicial recall, and for that reason vetoed the New Mexico-Arizona statehood bill at the last session. The Arizona constitution is the most thorough-going, progressive constitution yet adopted. It provided that every public official holding an elective office should be subject to recall upon petition of twenty-five per cent of the voters. The officer then had the alternative of resigning within five days or standing for re-election. He could justify his actions by a statement on the ballot in not to exceed two hundred words. The friends of the reforms which we have discussed in this article are almost unanimous in their advocacy of the recall for legislative and executive officers, but there are many who do not favor the judicial recall.

If the initiative and the referendum are accepted, it is only one more step and probably a necessary one in the program, to provide the recall for objectionable public executives and legislators. It is quite another question as to whether this recall ought to be applied to the judiciary. Judges are not chosen to represent the people or on any expression in advance as to how they will hold in a certain case. Their duty is to determine not what the law shall be, but what it is. It is felt that their independence and the supremacy of the law would be imperilled by subjecting them to the danger of the recall if their services are not satisfactory. But it is urged by thorough-going progressives who go the whole journey toward popular control, that a good judge need not fear the displeasure of the people and that a recall for every elective officer is necessary for a complete control of the people over their government.

The fundamental reasons urged by the advocates of all these reforms is that they make the government more responsive to public opinion. The aim of the direct primary and the limitation of campaign expenses is to destroy the personal obligation of the official to the convention or political boss. The purpose of the initiative and referendum is to give the electorate power over its representatives in the matter of legislation. The recall is to be used to eliminate unsatisfactory officials. The commission form of municipal government is demanded to secure efficiency and responsibility. The separation of business and politics, the destruction of the irresponsible political machine, the freeing of the natural leaders of the people from the domination of privileged interests, the union of power and accountability, the definition of all rights in terms of the common good and the complete acceptance of the theory of the severeignty of the people and the control of the majority-these are the results which those who believe in these latest things in government confidently predict.





The following extract is necessarily brief but nevertheless offers an illuminating survey of a growth which has differentiated the nineteenth century from any other. Dr. Marburg, its author, is a graduate of the Rensselaer Polytechnic Institute at Troy, N. Y., and is Professor of Civil Engineering in the University of Pennsylvania.

## NINETEENTH-CENTURY ENGINEERING: ITS EVOLUTION, AND SOMETHING OF ITS BEGINNINGS IN AMERICA\*

EDGAR MARBURG.

Engineering, in its modern and highest sense, had its birth in the nineteenth century when science became its spirit. The history of science,—its early birth, its long slumber, its awakening scarce four centuries ago, its rapid rise, and, finally, its beneficent union with the art of the century just closed,—forms one of the most impressive chapters in the annals of the human race. . . . .

Science received its first vigorous impulse during the third and fourth centuries before the dawn of the Christian era. Aristotle and Archimedes—twin luminaries of the ancient scientific world—were its chief exponents. . . The Aristotelian philosophy, in form much mutilated and perverted, was destined to hold sway for well-nigh twenty centuries. . . The application of the principles of science to the practice of what were called the sordid arts was held in contemptuous disdain by the learned as a descration of science. Inductive methods of investigation were similarly despised: if facts did not accord with philosophic theories, so much the worse for the facts.

Thus steeped in ignorance and superstition stood the world at the dawn of the sixteenth century. Exact science had made no progress since the days of Archimedes. Then came the intellectual awakening. . . . The leaders in the crusade, Copernicus, Galileo, and their followers, met with fierce denunciation for their heresies. . . . A new school of philosophers sprang up; the light of science had been rekindled. . . . But the breaking down and stamping out of the time-honored dogmas and superstitions was still the work of centuries.

\*Address read on January 19, 1901 by the retiring president of the Engineers' Club of Philadelphia. Reprinted by courtesy of "The Proceedings of the Engineers' Club of Philadelphia."

To recount, even in the barest outline, the chief discoveries of the illustrious line of scientists who cleared the way, during the sixteenth, seventeenth, and eighteenth centuries, for the triumphs of our age would far transcend the limits of my narrative, and were indeed foreign to its purpose. The important fact is to be held in view, however, that up to the beginning of the present century, science—notwithstanding its brilliant progress—had made relatively little impress upon the arts. Engineering, the special subject of our inquiry, was then, as it had ever been, the art and not the science and art of construction. . . Practice and theory, so far as the latter had been developed, were still separated by a formidable gulf. . . . Such few experiments as had been made to test the validity of theoretic laws had necessarily been conducted on a small scale with crude appliances. . . .

Such, in brief outline, were the conditions at the opening of the nineteenth century, nor might they have been essentially different at its close but for the discovery of the potentialities of

steam. . . .

Although it is impossible in our day to gain a just conception of life a century ago, yet it will at least conduce to a better understanding for present purposes to notice briefly the state of transportation in England and America during the period immediately antedating the age of steam.

The history of barge canal navigation in England dates only from 1750, when the first Act was passed authorizing the construction of a canal from Worsley to Manchester. It was a prodigious undertaking for its day. . . . The roads out of Manchester were so wretched that the traffic had to be carried on largely by pack-horses. Much suffering resulted, especially in winter, from the frequent scarcity of food and dearness of fuel for want of transportation, although coal abounded within a short distance of the town. . . .

Nevertheless, the first canal projects in England evoked a storm of ridicule and opposition, as did the railways a half-century later. . . . An engineer consulted by the Duke on Brindley's plan of spanning the Irwell by an aqueduct, condemned the same as wholly impracticable, closing with the caustic observation: "I have often heard of castles in the air, but never before saw where any of them were to be erected." Within less than two years the canal had been completed as projected, and the "castle in the air" had become a thing of stone and mortar. . . .

The physical difficulties surmounted in the construction of these new arteries of travel and commerce, by expedients equally bold and ingenious, are among the most notable achievements in the earlier history of engineering, to which justice can not be done by a brief recital.

These earlier works, aside from their immense commercial value to the districts traversed, proved so remunerative to their owners that similar enterprises were started on all sides. Before the close of the century, England had been channeled in all directions, and the kingdom stood on the verge of a canal craze. . . .

In America the conditions at that early period were very different. When the colonies had emerged from their long struggle for independence, the question of improved transit pressed with doubled force. The settlements were widely scattered; the highways which threaded the intervening wilderness were in a state wretched beyond description; but the country was impoverished and public improvements on a larger scale were for the time impossible. Stages, retired for the most part during the war, resumed their lumbering course between distant towns. Rivers were crossed in row-boats and clumsy scows. . . . To go from Philadelphia to Boston meant an arduous journey of nine days. . . . The tour from Philadelphia to New York usually occupied three days.

Canals had at that time no existence in America. Long before the Revolutionary War, far-sighted men had, indeed, perceived their economic value, and general locations had been proposed; but nothing decisive had resulted. . . . .

The war set for a time an end to all such schemes; but soon upon its close canal construction was actively initiated. As early as 1785 the Potomac Company was incorporated, with Washington himself as president, for the improvement of navigation on the Potomac. The Santee Canal, to connect the Santee River with Charleston harbor, was chartered in the year following. This canal, twenty-two miles in length and completed in 1800, had the distinction of being the first artificial waterway for inland navigation in America, and the misfortune of proving unsuccessful. The Schuylkill and Susquehanna Navigation Cmpany and the Delaware and Schuylkill Navigation Company were incorporated in 1791 and 1792 respectively. . . Long afterward their interests were merged and the work was finally completed as the Union Canal in 1827. . . .

Space does not admit of a connected account of these early navigation projects. An exception must be made, however, of an enterprise in New York which paved the way for the great Erie Canal. In 1792 the Western Inland Lock Navigation Company obtained authority by Act of Legislature to establish navigable communications from the Hudson River to Lake Ontario and to Seneca

Lake. . . Navigation from Schenectady to the Seneca Falls was opened in 1796, at a cost far exceeding the original estimate of \$200,000.

Reviewing these early navigation projects in general, their history is largely one of failure—partial or complete—and of financial loss. . . . Engineering skill and money were both lacking. The cost usually far outran the estimate. The want of experience

necessitated the employment of foreign engineers. . . .

The bold conception of connecting the Hudson with Lake Erie by an independent canal can not be definitely traced to its first author. The question began to be agitated soon after 1800. The magnitude of the undertaking seemed, however, so appalling that the matter was not taken seriously until 1808, when Resolutions were passed by the State Legislature looking to the appointment of a committee "to take into consideration the propriety of exploring, and causing an accurate survey to be made of the most eligible and direct route between the tide waters of the Hudson River and Lake Erie." To initiate this work, the modest appropriation of \$600 was set aside. . . Again nine years elapsed until, by the passage of the memorable Act of April 17, 1817, the enterprise was definitely launched. So vigorously was it prosecuted that it was completed within eight years, its total length from Albany to Buffalo representing a distance of 363 miles. . . . The Erie canal will be forever memorable as the first great triumph of native engineering skill.

Let us turn now to a hasty survey of the early history of steam. In 1763 Watt conceived his master-thought, destined to revolutionize the world. After a wearisome struggle of thirteen years the first practical difficulties had been surmounted, and Watt's low-pressure, condensing engine pointed out new possibilities in the use of steam. Men's minds soon fell to exploiting these in novel channels. In 1801 Symmington used Watt's engine to propel the "Charlotte Dundas" on the Clyde. The honor of the first commercial success in steam navigation was won, however, by America, in 1807, when Fulton's "Clermont" steamed from New York to Albany. Indeed, as early as 1787, the erratic genius of John Fitch had contrived a diminutive steam craft, "The Perseverance," which made a trip up the Delaware from Philadelphia to Burlington. The first crossing of the Atlantic by steam was from West to East, in 1819, when the American vessel, the "Savannah," covered the distance from Savannah to Liverpool in twenty-five days, during eighteen of which she had proceeded under steam.

As early as 1779, an American, Oliver Evans, had constructed

the first high-pressure, non-condensing engine. His application, in 1786, for a patent on the propulsion of land carriages by steam was denied by the State of Pennsylvania, the idea being regarded as preposterous. The patent was awarded later by the State of Maryland. It is estimated that in 1803 there were not more than six steam-engines in America, two of which belonged to the Philadelphia waterworks. These engines as well as their boilers were made largely of wood.

At the beginning of the century, Trevithick was struggling in England for the adoption of high-pressure steam against determined opposition, headed by Watt himself. Nevertheless, his first steam-carriage, nicknamed "The Puffer," was operated in 1801, and was followed three years later by the first locomotive worthy of the name.

George Stephenson's first locomotive was built in 1814. The first passenger train, with Stephenson as engineer, was run on the Stockton and Darlington Railway on September 27, 1825. Then came the happy combination of the steam-blast with the multitubular boiler which, in October, 1829, enabled Stephenson's "Rocket" to distance all competitors in the famous trial on the Liverpool and Manchester Railway. The speed developed was about thirty miles an hour. Four years earlier, Nicholas Wood had written in his then authoritative treatise on the railway: "Nothing can do more harm to the adoption of railways than the promulgation of such nonsense as that we shall see locomotives traveling at the rate of twelve miles an hour."

Thus, following Watt's invention by over fifty years, the locomotive had at length attained to something like perfection. Nothing in the history of invention is more pathetic and yet more inspiring than the life-stories of some of these heroic early workers. In the face of poverty and the derision of their fellows they struggled ever on. Their burning thoughts gave them no rest, and disappointment served only as a spur to greater effort. Negatively, each failure contributed something to the common fund of knowledge, and thus their labors were, after all, not wholly wasted. . .

The experiments with steam locomotion in England soon attracted the attention of American engineers. Early in 1828, or nearly two years before the historic competition already mentioned, Horatio Allen had been sent to England to purchase three locomotives for the Delaware and Hudson Canal Company for trial between Honesdale, Pa., the head of navigation on the canal, and the coal-mines at Carbondale, a distance of about sixteen miles. The first of these, and indeed the first locomotive in America,—

the "Stormbridge Lion,"—reached New York on May 17, 1829. Its first trial, a run of three miles and return, was made at Honesdale on August 9th of the same year, with Allen himself at the throttle. . . . .

The Baltimore and Ohio Railroad was chartered in 1827, and the corner-stone was laid on July 4, 1828. The first section of thirteen miles was opened on May 24, 1830, and it was here, on August 28 of the same year, that Peter Cooper ran, with his own hands, the first locomotive constructed in America. It was a crude, hastily improvised affair, weighing less than one ton, built under Cooper's direction, and called the "Tom Thumb." The boiler tubes were made of musket barrels. The trial was merely an experiment to test the capability of a locomotive on sharp curves, which was amply demonstrated. But horses were continued as the sole motive power until shortly after the famous competition instituted by the company in 1831 for locomotives of strictly American manufacture. The "York," designed by Phineas Davis, carried off first honors and the prize of \$4,000. It had been stipulated that the weight of the locomotive, ready for service, should not exceed 3 1-2 tons, and that preference would be given, other things equal, to the engine of the lighest weight. The specified load was 15 tons, to be drawn at a speed of 15 miles an hour on a level stretch. The sharpest curve had a radius of only 400 feet.

The honor of having been the first railroad in the world designed from the start exclusively for locomotives and the first exceeding 100 miles in length belongs to the South Carolina Railroad, built from Charleston to Hamburg, opposite Augusta, a distance of 136 miles. Chartered in 1827, construction was not begun till two years afterward, under the direction of Horatio Allen as chief engineer. Allen advised in favor of the new motive power on the broad ground that he saw greater possibilities in the development of the iron horse than of its four-legged cousin. The first locomotive built in America for actual service, the "Best Friend," made its successful début on this road early in 1831. It was designed by E. L. Miller, built by the West Point Foundry, but came to an untimely end through the explosion of its boiler, the negro fireman having innocently fastened down the lever of the safety-valve.

The first passenger train in America deserving of that designation was hauled on the Mohawk and Hudson Railroad from Albany to Schenectady, on August 9, 1831, the second anniversary of Allen's trip. The engine was the famous "De Witt Clinton,"

built by the West Point Foundry; the distance, about sixteen miles.

In Pennsylvania a number of tramways to the coal-mines had been built at an earlier date, beginning with the gravity road at Mauch Chunk in 1827. But the Philadelphia and Columbia Railroad begun in 1829 and completed in 1834, was the first in this State designed for general traffic. Together with the Pennsylvania Canal and the famous Portage Railroad it established a continuous line of communication between Philadelphia and Pittsburg. Portage Railroad, one of the boldest engineering achievements of its day, should not be forgotten in this recital. . . . The total length was 36 miles. The Alleghany Mountains were crossed by ten levels and ten inclined planes, operated by steam hoists. The ascent from Hollidaysburg to the summit was 1330 feet in 10 miles, and the descent to Johnstown 1171 feet in 26 miles. Its chief features, otherwise, were an 80-foot masonry arch spanning the Connemaugh, destroyed during the Johnstown flood, and a tunnel got feet long-the first railroad tunnel in America.

The early English locomotives, imported in America, proved, for the most part, dismal failures. By reason of their weight and their rigidity they were adapted only to substantial roadbeds, comparatively straight and level. In this country the cost of such construction was prohibitive. The Liverpool and Manchester Railway was built at an expenditure exceeding \$100,000 per mile. The cost of the early railroads in America, with some exceptions, was scarcely one-tenth that sum. The problem on this side of the Atlantic was to quickly open up a vast, sparsely settled country with the limited means at hand. Steep grades, sharp curves, and light uneven tracks were inevitable. Substantial iron rails were too expensive. Strapiron, spiked to wooden longitudinals, supported on stone or timber, was the the best substitute available. These iron straps, cut to miter-joints, soon wore loose and not infrequently curled up, and forced their way through the car-bottoms. They were called "snakeheads," and became in time a serious menace to the safety of the train and individual passengers.

Effective remedies became imperative, and native ingenuity was equal to the occasion. The double problem of distributing the weight of the locomotive on six instead of four wheels, and at the same time increasing its lateral flexibility, was solved by Jervis's swiveling truck as early as 1832. The equal distribution of the load upon the wheel base on an uneven track, and vertical flexibility in general, were effected through Harrison's invention of the equalizing lever in 1837. These features, since copied extensively in

Europe, were for many years the distinguishing characters of American locomotive practice. Space forbids mention of the important improvements originated by James, Winans, Baldwin, Norris, and other American inventors.

As early as 1840 Norris, of Philadelphia, delivered in England the first four of eight locomotives ordered by the Birmingham and Gloucester Railway, to operate the three per cent Lickey incline, two miles long—a feat which no English locomotive could accomplish. The first trial with the "Philadelphia" was so successful that

it resulted in a second order for sixteen locomotives.

Mathias Baldwin built his first locomotive, "Old Ironsides," in 1832. During the year just past (1900) the Baldwin Works sent its output of 1200 locomotives, weighing not far from 100,000 tons, to all corners of the globe. The acceptance of "Old Ironsides" became a matter of serious concern because its contract of 5 tons had been exceeded by nearly one-half. Our locomotives have now attained an extreme weight, including tender, of nearly 200 tons.

During the five years from 1830 to 1835 the railway mileage in the United States had increased from 30 to 1098; at the close of the century it stands, in round numbers, at 190,000, exclusive of second tracks and sidings. In striking contrast with the gigantic consolidation of our day, it is interesting to recall that a half-century ago the line from Albany to Buffalo and Niagara was divided between a dozen different companies.

The general type of the modern American locomotive became well defined in 1836 with Campbell's eight-wheel engine with its two pairs of coupled drivers and swiveling truck. The changes since that time have been but so many steps in the general scheme

of evolution to latter-day perfection.

At the beginning of the railway era in England it was seriously proposed by some extremists to fill up the canals and to convert them into railways. A few years later the reaction had set in. . . . Fairbairn (Henry) published a treatise in 1836 adducing figures in proof of the proposition that the new mode of locomotion was ten times as expensive as horses, and that it was folly to persist in its employment. Perhaps no brief statement could place the conditions then and now in stronger contrast.

With the application of steam to manufactures and transportation the field of engineering assumed a scope before undreamed of. . . . Without detracting one whit from the glory of these earlier accomplishments—on the contrary, to the everlasting credit of their authors—may it be asserted that engineering had little scientific basis before the middle of the nineteenth century.

Though Black had enunciated his doctrine of latent heat before Watt's time, the beginning of exact knowledge concerning the relation between heat and work dates from 1824, when Carnot founded the science of thermodynamics. Its sound development became possible only after Joule's experimental derivation, in 1843, of the mechanical equivalent of heat. This paved the way in turn for the profound researches of Clausius, Rankine, Lord Kelvin, and others, with their far-reaching consequences to steam-engineering practice.

The application of the laws of elasticity to simple beams was but vaguely recognized until Navier's studies appeared in 1824, and the problem was not completely solved till Saint-Venant supplied the missing links in 1853—nearly two centuries after the discovery of Hooke's classic law. The development of the theory of columns was, in a general way, concurrent with that of beams. The foundation was laid by Euler in the eighteenth century; a correct, though special formula was derived by Tredgold early in the nineteenth, but its value was not perceived until resurrected by Gordon a half-century later, and by him applied to the results of Hodgkinson's famous tests, and developed finally into its general form by Rankine. These results were not achieved, however, without the contributions of a long line of eminent elasticians. The process was one of gradual evolution, extending over several centuries.

The theory of stresses in framed structures presents a far more remarkable history in that it dates back only to 1847, when Squire Whipple, of Utica, N. Y., published the first correct analysis, as a part of two "essays" on bridge building. This work, covering 120 printed pages and 10 plates of illustrations, will ever remain one of the most noteworthy contributions to engineering literature. In the whole history of engineering there is perhaps no fact more curious than that up to about fifty years ago bridge building stood upon a purely empiric basis, not only in America, but throughout the world. The safety of a new design and its merit compared with other types could be determined only by the crude process of subjecting models to actual tests. The attainment of a correct and economic distribution of the material throughout all parts was obviously impossible. The security of these earlier structures lay largely in the fact that they were mostly of a composite type, so that the weakness of a single member did not necessarily destroy the integrity of the whole fabric. Notwithstanding this lack of exact knowledge concerning the special functions of each component part, the building of wooden bridges was developed to a high degree of excellence, and notably in America by Palmer, Burr, Wernwag, Town, and Long, whose work has survived, in part, to this day. Wernwag's "Colossus" bridge, built across the Schuylkill at Fairmount, Philadelphia, in 1812, and destroyed by fire in 1838,

had the remarkable span of 340 feet 3 3-4 inches

The later products of American bridge building—beginning with the works of Howe, Whipple, and Pratt, and closing with achievements which need not here be specified—may challenge comparison with the world for their intrinsic excellence. At the same time it is only too apparent that little more than a beginning has as yet been made in this country in the development of what may be called "bridge architecture." . . . Again, it should in justice be acknowledged that America's contribution to the development of the theory of stresses has been relatively insignificant.

No review, however cursory, of nineteenth-century engineering can be made without recognition of the tremendous debt it owes to metallurgy. The obligation is indeed a mutual one, for marked progress could not have been achieved in either practice save through the stimulating impulse of the other. To appreciate in some slight measure the advance of iron metallurgy within modern times, let it be remembered that the first cast-iron bridge in Europe was not built till 1776, and the first in America probably not before 1840. The manufacture of cast-iron on a larger economic scale became possible only after Neilson's invention of the hot blast in 1828. The superior merit of wrought-iron for constructive purposes did not become fairly established till toward the middle of the century. This metal had hardly gained its ascendancy before a new and mightier competitor arose which now commands the field. Thus metallurgy has created three great epochs in constructive engineering, virtually within the span of a single century.

The indebtedness of modern engineering to the so-called abstract sciences is so obviously universal that no specific evidence need be adduced. Indeed, in a broad sense, it may be said that every step in its development and every detail in its practice represent, directly or indirectly, the useful exploitation of some principle or discovery of science. Nor should it be forgotten that the most far-reaching practical results have not infrequently had their source in scientific observations which, even to the most acute, seemed at the time to hold little or no promise of future usefulness.

# The Vesper Hour\*

Under the direction of Chancellor John H. Vincent

# A Sheaf of Christmas Poems

Listen to the Exhortation of the Dawn! Look to this Day, For it is Life, the very Life of Life. In its brief course lie all the Varieties and Realities of your Existence;

The Bliss of Growth;
The Glory of Action;
The Splendor of Beauty;
For Yesterday is but a Dream,
And Tomorrow is only a Vision;
But Today well lived makes
Every Yesterday a Dream of Happiness,
And every Tomorrow a Vision of Hope.
Look well therefore to this Day!
Such is the Salutation of the Dawn.

### CHRISTMAS EVE†

O Pulsing earth with heart athrill With infinite creative will!
O watchful shepherds in whose eyes Sweet hopes and promises arise!
O angel-host whose chanting choir Proclaims fulfilment of desire!
O flaming stars so purely white Against the black Judean night O blessed Mary bending low With sense of motherhood aglow!

\*The Vesper Hour continues throughout the year the ministries of Chautauqua's Vesper Service.

†By permission of Moffat, Yard & Co., Publishers.

O holy babe with haloed head Soft pillowed in a manger bed! O mystery divine and deep Help us thy prophecies to keep!

-Mrs. J. T. Fields

#### HYMN\*

O Patient Christ! when long ago
O'er old Judea's rugged hills
Thy willing feet went to and fro,
To find and comfort human ills—
Did once thy tender, earnest eyes,
Look down the solemn centuries,
And see the smallness of our lives?

Souls struggling for the victory,
And martyrs, finding death was gain,
Souls turning from the Truth and Thee,
And falling deep in sin and pain—
Great heights and depths were surely seen,
But oh! the dreary waste between—
Small lives, not base perhaps, but mean.

Their selfish efforts for the right,
Or cowardice that keeps from sin—
Content to only see the height
That nobler souls will toil to win!
Oh, shame, to think thine eyes should see
The souls contented just to be—
The lives too small to take in Thee.

Lord, let this thought awake our shame,
That blessed shame that stings to life,
Rouse us to live for thy dear name,
Arm us with courage for the strife.
O Christ, be patient with us still;

<sup>\*</sup>By permission of Houghton Mifflin Co., Publishers.

Dear Christ! remember Calvary's hill— Our little lives with purpose fill! —From Margaret Deland's "The Old Garden"

#### TO THE CHRIST\*

Thou hast on earth a Trinity— Thyself, my fellow man and me; When one with him, then one with Thee Nor, save together, Thine are we.

### THE CHRIST CHILD ALONE

In the long pageant of man's destiny,
A sweep of sunburnt country and a hill,
Where sits a little child to watch the sky,—
O little Jesus, wide-eyed, charmed, and still,
How doth Thy hushed, expectant, wondering will
Commune with blade, and flower, and startled thing
That flits across Thy path on timid wing?
What thoughts, what dreams, what hopes, what fantasies,
Doth yon vast sweep of radiant heavens bring?
In Thy child's brain loom what strange images?
—Hannah Parker Kimball

### WHAT SHALL IT PROFIT?†

If I lay waste, and wither up with doubt
The blessed fields of heaven where once my faith
Possessed itself serenely safe from death;
If I deny the things past finding out;
Or if I orphan my own soul of One
That seemed a Father and make void the place
Within me where he dwelt in power and grace,
What do I gain by that I have undone?

-W. D. Howells.

<sup>\*</sup>By permission of Small, Maynard & Co. †By permission of Houghton Mifflin Co.

### CHRISTMAS IN CALIFORNIA\*

A languor of deliciousness

Fills all the sea-enchanted clime;

And in the blue heavens meet, and kiss,

The loitering clouds of summer-time.

This fragrance of the mountain balm From spicy Lebanon might be; Beneath such sunshine's amber calm Slumbered the waves of Galilee.

O wondrous gift, in goodness given, Each hour anew our eyes to greet, An earth so fair—so close to heaven, 'Twas trodden by the Master's feet.

And we—what bring we in return?

Only these broken lives, and lift

Them up to meet his pitying scorn,

As some poor child its foolish gift:

As some poor child on Christmas day
Its broken toy in love might bring;
You could not break its heart and say
You cared not for the worthless thing?

Ah, word of trust, His child! That child
Who brought to earth the life divine,
Tells me the Father's pity mild
Scorns not even such a gift as mine.

<sup>\*</sup>By Permission of Houghton Mifflin Co.

I am His creature, and His air
I breathe, where'er my feet may stand;
The angels' song rings everywhere,
And all the earth is Holy Land.

-E. R. Sill

## THE CATHEDRAL\*

O Power, more near my life than life itself (Or what seems life to us in sense immured) Even as the roots, shut in the darksome earth, Share in the tree-top's joyance, and conceive Of sunshine and wide air and wingéd things By sympathy of nature, so do I Have evidence of Thee so far above. Yet in and of me! Rather Thou the root Invisibly sustaining, hid in light, Not darkness, or in darkness made by us. If sometime I must hear good men debate Of other witness of Thyself than Thou, As if there needed any help of ours To nurse Thy flickering life, that else must cease, Blown out, as 'twere a candle, by men's breath. My soul shall not be taken in their snare, To change her inward surety for their doubt Muffled from sight in formal robes of proof: While she can only feel herself through Thee, I fear not Thy withdrawal; more I fear, Seeing, to know Thee not, hoodwinked with dreams Of signs and wonders, while unnoticed, Thou, Walking Thy garden still, commun'st with men, Missed in the commonplace of miracle.

-James Russell Lowell

<sup>\*</sup>By Permission of Houghton Mifflin Co.



### THE JOY THAT ABIDES

For what is the Christ-child's message?

The love that enspheres all love;

The nearness of these groping lives

To the Father-life above;

The peace that passeth knowledge;
The wisdom we may not guess,
That folds our soul and the souls we crave
In perfect tenderness.

Then let each heart go singing,
This latest Christmas morn,
The song of the day when far away
The Hope of the World was born!
MARION PELTON GUILD.



### "AMERICAN ENGINEERING"

In the series on "American Engineering" which The Chautauquan is offering this year there lie possibilities of which ready-witted C. L. S. C. readers will be quick to avail themselves. These articles apply directly on the environment of every person in the United States and they are going to wake up all of us who have taken things for granted to find out for ourselves what the engineer has done for us in our own towns and in our own houses. If your church is heated by a sheet iron stove you know it, without question, but if its heating arrangements are more modestly withdrawn do you know whether your pew is kept com-

fortable by warm water or by steam? Or whether your town library has the direct or indirect system? Or how your City Hall is ventilated? If you have bought a refrigerator recently you have looked into the domestic aspect of refrigeration, but do you know how your marketman does it on a larger scale? It might be worth your while to find out. Go and let the engineer in charge tell vou how the men who are building the tunnel in the next town are supplied with air. Notice how quickly compressed air brings you back the penny change due you from a dollar bill when you have made a 99 cent purchase in a department store. Did you know that mail bags were sent across New York and Boston in pneumatic tubes? Have you ever thought how the elimination of engines in mines made the miner's life pleasanter by doing away with the engine's contribution of dust and heat? Think out how many applications of the gasoline engine can be made on your farm to lighten farm work and housework and then take a ride in a motor car or a motor boat and remember the days when nobody used gasoline except for cleaning gloves and everybody was afraid of it then.

If you are in the library some day with a half hour to spare look over the files of the newspapers just after the Spanish-American war and find out what the sanitary engineers did for Havana, and then forget the jokes about the plumber and investigate the sewerage system and the street cleaning system and the garbage disposal system of your own town. If your Health Department is not up to the mark let it know that you know it—not by fault-finding but by constructive suggestion.

Times have changed indeed since the walls of a building were put up first and the inside arrangements afterwards. Now builders have gone back to the methods of the Romans described by Mr. Pilcher in his article on Roman Architecture in The Chautauquan for May, 1910. Modern construction replaces timber by steel but the pro-

cess is essentially the same as that used in the days of the Empire. Look sharply at the next new building you pass and see how the reinforcement is secured. If somebody tells you that that steel beam has a thicker band of concrete at the middle than at the ends because its tensile strength is greater than its ability to bear a load while the character of concrete is just the opposite and so they supplement each other, think it over until you are sure that you understand what he means. Do you know that rough stones are more effective than smooth stones in the making of concrete? Stop at the next concrete mixer that you pass and see what kind of stones are being shovelled in and ask why.

When it comes to a study of the very latest development in engineering, "Scientific Management," every one of us can be an efficiency engineer. Women are reputed conservative in trying new things; they should be alive to the advantage of every new labor-saving device, they should arrange their kitchens so that the linoleum will show one worn island and not a series of roadways such as the cows traced out between the waterfront and Boston Common: they should make their heads save their time as well as their heels. It is never too late to learn how. Bricks have been laid in practically the same way and at practically the same rate of speed since the days of the Ptolemies, yet just last year a builder of New York State worked out a method by which superfluous motions could be eliminated until a man could lay in three hours the same number of bricks that up to that time had been considered a day's work. The argument that anything is impossible because it has not yet been done is discredited faster than ever before by the facts of today. You cannot even say that you cannot flyso recently a seemingly impossible feat. Anyone can fly now if his courage is reinforced by the price of a trip. But you never would have had today's opportunities it there had not been pioneers in experimentation. Why not be one of them yourself? "The voice of Time cries to man 'Advance.' "



Lone Squaw Claim held by C. L. S. C. squaw reader with dog and gun for protection and Chautauqua books for pastime.



Snake River and Fromans Ferry.



Freight teams loaded with wool crossing Snake River for Caldwell.

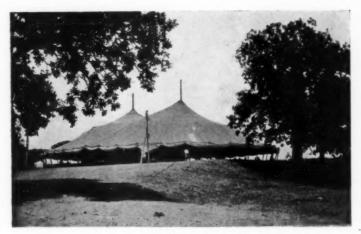
Scenes near Caldwell, Idaho.



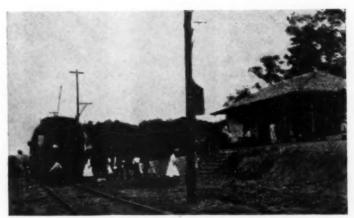
Public Library Shelbyville, Ill.



Danville, Ill., Carnegie Library.



Tent at Lincoln Park (Kansas) Assembly.



Entrance to Litchfield-Hillsboro (Illinois) Chautauqua.



Mr. Robinson, Author of "The 20th Century American."



Mr. Rhodes President C. L. S. C. Class of 1912.



Mr. Smith Author "The Spirit of American Government."



Mr. Dow



Mr. Heydrick



Mr. VanDyke

Authors of the C. L. S. C. Required Reading in the Chautauquan for 1911-1912.

### A WORD OF GREETING TO THE IQ12 CLASS

Our four years of study are almost at an end. Is our final work so well completed that we are not in doubt of graduation? Certainly few of our numbers should fail to reach the goal to which we started with such high hopes. "If to our own selves we are true," we must soon be ready for the final march, which so pleasingly ends each year's exercises.

Our beautiful new banner is almost ready and it will be an inspiration to walk behind it. How pleased we shall be to hear the tramp, tramp, tramp, of all on "Recognition Day." If any of you have fallen behind, don't be discouraged, for there is still an abundance of time to recover lost ground. We shall keep open ranks, to the last minute, for any late arrival, for we need all in the procession. We don't want it said that either failure or neglect is a part of the creed of any member of 1912.

If you are not able to reach Chautauqua we trust that you will go to to some near Assembly to receive your diploma. That is the seal of success and you should endeavor to obtain it.

Let us all strive for a large attendance. It requires numbers for enthusiasm. Can't some member write a class poem or song? Bring one with you to the Lake next summer for class adoption.

With best wishes for a happy termination of our work.

Victor E. Rhodes.

President C. L. S. C. Class of 1012.



SPECIAL PROGRAM FOR THE BIRTHDAY OF JOEL CHANDLER HARRIS, DEC. 8

Biography.
 Paper. "The Part Played by Beasts in Old Folk Lore."
 Reading of one of the Uncle Remus stories.

4. Singing. Plantation Melodies.
5. Reading from "The Chronicles of Aunt Minervy Ann."
6. Music from Dvorak's "New World" symphony.

7. Tributes to Joel Chandler Harris. 8. Reading. "Mingo" or "Ananias."

#### AN ANNUAL PICNIC

It is the pleasant custom of the Norwalk (Ohio) C. L. S. C. to hold a picnic every year. By way of celebrating good work done the occasion of this last season was given over entirely to sport, no program being offered. A lovely lawn under foot and a beautiful sky overhead helped to make the occasion one of real delight. The Norwalk Circle is made up of women, but on this day the husbands were invited to see that Mrs. Jack ran no danger of becoming a dull girl because she was wise enough to mix play with her work.



#### A CALIFORNIA ADVOCATE OF WOMAN SUFFRAGE

At Pacific Grove, before the C. L. S. C. Class of 1911 made up of members of the Educanda and Vincent Circles, Judge Hayden delivered an address of which the San José *Herald* says:

It was of a nature to inspire every listener to a belief not only in the sincerity of Judge Hayden's words, but in the soundness of the doctrine of "Equal Rights." Making the statement that the Chautauqua movement had created a foundation for a new world, he touched upon experiments and the gradual evolution of governmental laws in the last 100 years and declared that there is no logical reason why man and woman should not have equal rights in the making of laws and in governing the land and referred to the time when in our country restriction was placed on the vote of man. "Women are reading and studying and reasoning and they will bring into politics that which will make for a higher standard of morals," said he, refuting as he argued in favor of suffrage, any possible arguments that could be brought against the cause.

#### IN IOWA

To "meet your Waterloo" when you are in Iowa does not mean that you have encountered defeat. It does mean that you have been captured by a delightful town and have fallen under the spell of the Waterloo C. L. S. C. Union. This year the Waterloo Chautauqua made its program on lines of such excellence that it appealed to the thoughtful on the highest grounds. The C. L. S. C. activities were strongly featured in Round Tables and on the platform.



There is something energizing about the very name, "Progressive," and the C. L. S. C. of Creston responds heartily to its suggestion. Indeed they are so very wide-awake that it is possible that perhaps they might even be progressive if they called themselves the "Dreamers" or some such slumberous name. Their closing meeting varied the usual presentation of reports by an acceptable musical program and ended the afternoon by festivities on the lawn.

### CALIFORNIA S. H. G.

A year ago the Californians around Oakland formed a Society of the Hall in the Grove and in May of this year it held a meeting to review its career of the preceding twelve months and to elect officers. The Society does an important work in forwarding the interests of the Pacific Grove Assembly. This is something that every C. L. S. C. Circle or reader near an Assembly ought to have at heart—the presentation of the work of the Reading Course to the people gathered there, to many of whom it is the one thing desirable to uplift their lives. They need it. Help them to get it.

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#### CHRISTMAS CARDS

Readers are sending to the Chautauqua Book Store for Dickens cards for Christmas and birthdays and dinner cards. They are ten cents.

### WINFIELD (KANSAS) ASSEMBLY

The C. L. S. C. is furthered at the Winfield Assembly. Mr. A. H. Limerick, the late manager, recognized the value of the work for the individual, as a means of community uplift, and as a commercial asset for the Assembly. Mrs. Limerick's interest in the Reading Course has been thorough-going. The present manager, Mr. Shields, is an intelligent successor of Mr. Limerick. His enthusiasm is vigorous for every aspect of the Assembly from the lovely grounds with their 130 varieties of trees to the Round Tables which make a part of every day's program. Miss Meddie Ovington Hamilton visited the Assembly this year and evoked the enthusiasm which her charming personality and eager telling of the C. L. S. C. story always inspire. There were five graduates, one with 13 seals and two with six each. On Recognition Day a portrait of Chancellor Vincent was presented by the C. L. S. C. Alumni to the Chautauqua managers to be displayed upon the rostrum at subsequent occasions. Miss Hamilton was toast mistress at the material feast that followed the intellectual banquet of the earlier day and the toasts were brilliant and happy.



#### NEWS FROM READERS AND CIRCLES

Pendragon opened the postbag and drew out a handful of letters while the Man Across the Table made himself useful arranging chairs, and two chilly ladies sat down before the radiator and recalled Mr. Dow's November article on "Heating" as they examined its working.

"Shall I begin with an account of Recognition Day at Remington, Indiana?" asked Pendragon. "My correspondent says:"

"Recognition Day was observed by the C. L. S. C. of Remington, Indiana, at Fountain Park Assembly, August 16. A long procession, consisting of flower girls, alumni, the class, undergraduates, and the choir, formed near the tabernacle and marched through the grove, past the hotel to the Golden Gate where a beautiful and impressive ceremony took place. The class passed

under the arches, into the tabernacle where, seated with graduates of other years and undergraduates they took part in the Recognition service and received their diplomas. Rev. Hall Laurie Calhoun of the Chair of Greek and Hebrew of the University of Lexington, Kentucky, gave the address of the afternoon."

"It was just like Recognition Day at Chautauqua, New York, wasn't it?" asked an ardent assembly-goer. "The beautiful ceremony has stood the test of years," said Pendragon. "Here," he continued, "are a few lines about a Kansas gathering:"

"Our Larned (Kansas) Chautauqua Assembly was a success in every respect, and our reading circle is so large this fall we shall have to have three divisions and meet separately."

"Good! Good! Capital," cried all the listeners. "Creston (Iowa) always is up and doing," said Pendragon, "and their Recognition Day was accomplished brilliantly. My correspondent says:"

"At the close of the regular program Tuesday afternoon the annual Recognition Day Exercises of the C. L. S. C. were conducted. These exercises are always very pretty and impressive, and it was witnessed this year by a good sized audience. Seven ladies were recognized as having completed the prescribed study course of the C. L. S. C. and were presented with diplomas. The program consisted of responsive reading, a piano solo, a vocal solo, the Recognition Day address, and the presentation of diplomas. There were about fifty flower girls in line, and the day's delights ended with a delightful dinner when the S. H. G. welcomed the graduates into their fold."

"It is good to know that there is some organization waiting for us at the end of the four years. I always used to wonder how alumni associations were useful, but I see many uses for them now, and not the least is the feeling of lasting companionship that they give." "One feels that strongly at Chautauqua, New York," said Pendragon. "Here, for instance, is a letter telling of the summer activities of 1908 last season. You can see that they were enjoying each other's society mightily, even though they were graduates."

"The Class of 1908 had a breakfast at the tea room one fine morning in August, and chatted merrily over the covers, and admired the lovely menu cards painted with the class rose. 1908, aided by 1909, secured for the union class room three new rugs which were greatly liked for their artistic coloring. The Sage letter circle has given to the room a new combination desk, in honor of Henry W. Sage, who was acting president of 1908 for two years. This desk was nearly filled with new dishes.

"How home-y and pleasant that sounds."

"It is hard to turn from such pleasant reports to one of trouble," said Pendragon, "but I am sure all of you will feel the utmost sympathy for our South African member." She says:"

"I have had a terrible calamity with a fire breaking out in our thatched roofed parsonage, and completely destroying it, as our village was not provided with a fire brigade. All the family were saved but many valuable things destroyed—with the things being numbered many of my Chautauqua books and magazines."

"We do indeed send her our warmest sympathy," cried the Man Across the Table, and everybody agreed with him. "I seem to have done all the talking today," said Pendragon, "and now I throw the meeting open. Who wants to speak?" "I do," said the Minnesotan promptly. "I come from Montevideo and I regard THE CHAUTAUQUAN as the best magazine investment." "I have been a reader of THE CHAUTAUQUAN and the books for twenty-five years," said some one else. "I like the magazine better than any. I only wish I had taken it before September began," cried a Philadelphian. "I don't want to lose any numbers of the brave old CHAUTAUQUAN," added a member from Maine, while a Kentucky delegate from Mount Sterling exclaimed, "I must tell you how delightful we all think the coming year will be, and how lovely and instructive the July number was." "Such a course is a pleasure, yea, a real luxury," murmured an Ohioan. "Though I have passed the sixty-third milestone of my life, I am still desirous to remain intellectually fresh. The Dickens issue of THE CHAUTAUQUAN was of especial interest."

"With these compliments we'll close the meeting of this evening," said Pendragon genially. The Man Across the Table held the Anxious One's coat, and the two ladies by the radiator decided that the heating system was as direct as the radiator was obvious!

### C. L. S. C. MOTTES

"We study the Word and the Works of God." "Let us Keep Our Heavenly Father in the Midst."
"Never be Discouraged."



### C. L. S. C. MEMORIAL DAYS

OPENING DAY-October 1. BRYANT DAY-November 3. SPECIAL SUNDAY — November, second Sunday. MILTON DAY—December 9. College DAY — January, last Thursday. LANIER DAY-February 3. SPECIAL SUNDAY-February, second Sunday. Longfellow DAY-February 27. SHAKESPEARE DAY-April 23. Addison DAY-May 1.

SPECIAL SUNDAY-May, second Sunday. INTERNATIONAL PEACE DAY-May 18. SPECIAL SUNDAY-July, second Sunday. INAUGURATION DAY — August. first Saturday after first Tuesday. St. PAUL'S DAY-August, second Saturday after first Tuesday. RECOGNITION DAY-August, third Wednesday.



### OUTLINE OF REQUIRED READINGS FOR JANUARY

FIRST WEEK-JANUARY 1-8 "The Argentine" (THE CHAUTAUQUAN, "Reading Journey through South America," IV). The Expression of American Dramatists" (THE CHAUTAU-

QUAN, "As We See Ourselves," IV).
"Refrigeration" (The Chautauquan, "American Engineer-

ing," IV).

"Undemocratic Development;" "The Party System;" "Changes in the State Constitutions after 1787" (Smith, Chapters VII, VIII, IX).

"Municipal Government;" "Individual Liberty as Related to the Constitution and to the Economic System" (Smith, Chapters X, XI, XII).

FOURTH WEEK-JANUARY 22-29 "The Influence of Democracy upon the Constitution;" "Effect of the Transition from Minority to Majority Rule upon Morality;" "The Democracy of the Future" (Smith, Chapters XIII, XIV, XV).



#### SUGGESTIVE PROGRAMS FOR LOCAL CIRCLES JANUARY 1-8

Map Talk. "The Argentine."
 Story. "A Day in Buenos Aires" (Hale's "Guide;" Curtis's "Capitals of Spanish America;" Clark's "Continent of Opportunity;" "The Fourth City in America" by Shoorsmith in "Progress Magazine" for July, 1910).

- 3. Description. "Argentina's Centenary Celebrations" in the Bulletin of the International Bureau of the American Republies for September, 1910.
- "Refrigeration in the Home." Items from experience, such as the best place for the refrigerator; when is the icebox useful; why I prefer artificial ice, etc., etc.
- Report of a visit to a cold storage plant.
- Reading with distribution of parts, or performance of one of Howells' farces. "The Garroters," "The Sleeping Car," "The Mouse Trap," are all simple and amusing for parlor production.
  - JANUARY 8-15
- 1. Summary of Chapter XV, volume I, Bryce's "American Commonwealth.'
- Five-Minute Biographies of Recent Speakers of the House-
- Reed, Cannon, Clark.

  3. Paper. "The Power of the Speaker" (Bryce; "Outlook" for March 6, 1900; "World Today;" May, 1906; "Forum," vol. 41; "Century," June, 1900; "Review of Reviews," April, 1900; "North American," October, 1908; "Nation," March 18, 1909).

  4. Comparison of Bryce (volume II, Part III) on "The Party System" with Robinson's "20th Century American," chapter X, and Smith's "Spirit of American Government."

  5. Description of refrigeration processes used on an ocean liner.
- 5. Description of refrigeration processes used on an ocean liner 'Refrigeration on Shipboard," J. H. Hart, in "Cassier" for
- March, 1907).

  6. Reading or Recitation, "To the Federal Convention" by Timothy Dwight; or "The New Roof" by Frances Hopkinson.
- JANUARY 15-22

  Review of Alden and Zueblin articles on "Municipal Ownership" in THE CHAUTAUQUAN for March, 1911.
- Book Review. "Liberalism," by L. J. Hobhouse.
- Debate. "Should Immigration into the United States be Restricted?"
- "Unguarded Gates" by Thomas Bailey Aldrich. Recitation.
- 5. Paper. "Refrigeration and Electricity" ("Ice-making by Elec-"Refrigeration with Electric Motive Power." Gradenwitz in "Scientific American" for Aug. 5, 1905; "Refrigeration with Electric Motive Power." Gradenwitz in "Scientific American," Feb. 3, 1906; "Iceless Electric Refrigerator on a Small Scale," Jones in "Scientific American," June 10, 1905).
- 6. Description. "The First Trans-Andine Railroad from Buenos Aires to Valparaiso" by Harriet Chalmers Adams in the "National Geographic Magazine" for May, 1910.
- 7. Reading or Recitation. "The Federal Consitution" by William Milns.
  - JANUARY 22-29
- Composite Summary of chapter CXIV, Part V, vol. II of Bryce's "American Commonwealth."
- 2. Paper on the "Advisability of Restricting the Franchise by Educational and Property Qualifications but Extending it to Women who can meet those Qualifications."
- 3. Book Review. "Tales of the Pampas" by Bulfin.
- 4. Review of Mr. Bestor's article in this Magazine.

- Debate. "Is food that has been in cold storage two years fit to eat?"
- 6. Experiment. Bottle Experiment described by Mr. Dow.
- Talk. "Home Ice Supply." (D'Enville in "Country Life," Jan. 1908; "Kitchen Ice-making Machines," "Scientific American," Sept. 5, 1908; "Ice-making Machine for Domestic Use," "Scientific American," Oct. 17, 1908).
- "Scientific American," Oct. 17, 1908).

  8. Reading or Recitation. "Democracy," from Harriet Monroe's "Commemoration Ode."

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#### TRAVEL CLUB

Travel Clubs should be provided with Hale's "Practical Guide to Latin-America" with a large map of South America and with individual outline maps of South America which each member may fill in as the study progresses. Apply to the Book Store, Chautauqua, N. Y. Photographs, picture postcards, or pictures in books of all buildings and places mentioned should be exhibited.

In addition to the special bibliography in this number a general bibliography on the Reading Journey Through South America will be found in the September CHAUTAUQUAN on page 129. If any clubs or libraries can provide but two books for supplementary reading they should be Dawson's "The South American Republics" and Hale's "The South Americans." Of great contemporary interest is the "Bulletin" published by the Pan-American Union, Washington, D. C. This is a handsomely illustrated monthly magazine whose subscription price is \$2.00 a year. Every Travel Club will find a subscription worth while.

#### FIRST WEEK

- Map Talk. "Physiography of Argentina" (Hale's "Guide;" Akers's "A History of South America;" Clark's "Continent of Opportunity").
- Roll Call. "Natural Productions of Argentina" (Hale; Clark).
   Historical Sketch told through biographies of men mentioned in the article (Hale; Akers; Dawson's "South American Republics").
- Dialogue between a promoter and a prospective colonist showing the inducements offered to immigrants (Hafe; Dawson).
- Talk. "Education in Argentina" (Hale; Dawson; Clark; "School and College in Brazil and Argentina" by Baxter in "The Outlook" for August 10, 1907).
- Description. "Argentina's Centenary Celebrations" in the Bulletin of the International Bureau of the American Republics for September, 1910.
- second WEEK

  I. Map Talk. "Position of La Plata, Bahia Blanca, Rosario, Santa
  Fe, Paraná, Concepcion, Corrientes, Posadas, San Luis, Mendoza, San Juan, Cordova, Tucuman, Jujuy, Puerto Madryn,
- Santo Cruz.
  2. Roll Call. "Prominent Features of the Above Towns" (Hale).
- 3. Story. "A Day in Buenos Aires" (Hale; Curtis's "Capitals of Spanish America:" Clark's "Continent of Opportunity;" "The Fourth City of America" by Shoorsmith in "Progress Magazine" July, 1910; Ruhl's "The Other Americans;" Bingham's "Across South America;" see also magazine references

in the Readers' Guide to Periodical Literature).

Word Picture. "Tracing the Shipping in the Harbor of Buenos Aires to the Countries from which it Comes."

Explanation with diagram of the reason why the seasons south of the equator are the reverse of ours in their occurrence.

6. Dialogue of representatives of the foreigners in Buenos Aires. showing the interests of each group (Hale: Dawson).

THIRD WEEK I. Summary of "Argentina, the Wonderland of South America"

by Barrett in "Review of Reviews," July, 1905.

Comparison of the "Camp" with our own West (Hale's "The South Americans").

3. Book Review. "Modern Argentina" by Koebel.

4. Reading from "Tales of the Pampas" by Bulfin.

5. Descripion. "Crossing the Andes." "The First Trans-Andine Railroad from Buenos Aires to Valparaiso" by Harriet Chalmers Adams in the "National Geographic Magazine" for May, 1910; Clark; Ruhl's "The Other Americans;" "Across the Cordilleras in Winter" by A. B. Ruhl in "Scribner's" for

March, 1908.)
6. Historical Sketch. "The Quarrel between Chile and Argentina"

(Akers; Dawson).

Original Poem, "Christ of the Andes."

FOURTH WEEK

Talk. "What the Plata and the Paraná mean to Argentina."

Paper. "The Varied Peoples of Argentina."

Four Five-Minute Talks. "Going South—Patagonia, Tierra del Fuego, Straits of Magellan, Cape Horn" (Curtis's "Between the Andes and the Ocean;" Pepper's "Panama to Patagonia;" Shackleton's "Heart of the Antarctic;" "Andes and the Linear of the Antarctic;" "Armid the Islands of the Land of Fire" by Furlong in Harper's,

February, 1909).
rading. "The Strait of Magellan" by Brown in the "Indepen-Reading. "The Strait dent," Feb. 13, 1908.

Book Review. Prichard's "Hunting Camps in Wood and Wil-

derness" (Patagonia).

Paper. "Gold at the Southernmost Tip of the World," (Penrose in "Engineering Magazine," March, 1909; Journal of Geology, Nov. 1908; Review of Reviews, Feb. 1909).

Reading. "Round the Horn" by Shaw in the "Atlantic," July,

7. Reading. 1908.

### REVIEW AND SEARCH QUESTIONS ON JANUARY READINGS

AS WE SEE OURSELVES. CHAPTER IV. THE DRAMA.

1. What two American plays were produced before 1870? 2. Account for the scarcity of American plays. 3. Name three successful early plays. 4. What was the effect of the passage of the international copyright law? 5. What was the proportion of American plays in the season of 1910-11? 6. What subject is most popular? 7. Tell the story and the lesson of Howard's Aristocracy. 8. Of Fitch's The Climbers. 9. Of The Butterflies. 10. What is the general tone of the picture of society given by these plays? 11. What is the purpose of local color plays? 12. What is the plot of The Old Homestead? 13. Explain its long popularity. 14. Characterize five plays of New York. 15. What is the chief figure of Alabama? 16. Name two Middle West plays. 17. What national quality is shown in Colonel Sellers? 18. What period is shown in The Danites? 19. What is the story of The Great Divide and what is the meaning of the title? 20. Of what value is The College Widow? 21. What protest is voiced in The Henrietta? 22. What process of growth is outlined in The Fourth Estate? 23. How has the dramatist's field broadened in the lase decade? 24. How would you class The Man of the Hour? 25. What is the theme of A Gentleman from Mississippi? 26. Of The Lion and the Mouse? 27. How does the drama regard American politics? 28. What is the significance of the three recent race problem plays? 29. What lesson is taught by The Easiest Way? 30. What is the power of the drama? 31. What is the most striking point brought out thus far in this series?

READING JOURNEY THROUGH SOUTH AMERICA. CHAPTER IV. ARGENTINA.

1. Compare Argentina with the United States of America in size and in transportation facilities. 2. How great is its productiveness?

3. What characteristics has Buenos Aires?

4.

Of what sort is its government? 5. What are some of its great names? 6. Why may Argentina be considered a possible future rival of the United States in commercial supremacy? 7. Who gave its name to Buenos Aires and when? 8. What are the two parts of Argentina? 9. Name some of its large cities. 10. What was the early economic history of Argentina? 11. What was the chief political discussion of the formative period? 12. What features have marked Argentina's development within the last fifty years? 13. In what respects is Buenos Aires like Chicago? 14. What activities go on at the docks? 15. What part does the United States play in this commerce? 16. What efforts are made to keep Buenos Aires beautiful? 17. What is the make-up of the population and what its sentiment? 18. How do the different foreign elements foregather? 19. How is club life made attractive? 24. What is the make-up of the throng at Palermo Park? 21. What is the cause of the socialistic 22. What are some of the city's amusements? movement? 23. What is the serious defect of the streets? 24. How well provided is the city with utilities? 25. What is the extent of 26. Who live on the pampas? 27. What scenes mark harvesting activity? 28. What is the Gaucho and what his dress? 29. What is Koebel's book about? 30. What desirable element of population is lacking in Argentina? 31. For what is Mendoza famous? 32. Describe the Andean trip. 33. What does the Christ of the Andes commemorate? 34. What route is followed from Caracoles to Valparaiso? 35. What is the

AMERICAN ENGINEERING, CHAPTER IV. MECHANICAL REFRIGERATION

1. How long has mechanical refrigeration been used commercially?
2. What is its commercial value?
3. What are some

along the Paraná?

character of the Andean country? 36. What is said of Patagonia? 37. How was the Fuegian Archipelago formed? 38. Describe it. 39. What contrast to these scenes is offered in the northern Territories of Argentina? 40. What sort of scenery is found

of the places that make use of it? 4. What are the advantages of artificial over natural ice? 5. What opportunity is open to electric light stations? 6. By what three methods may cold be produced? 7. Describe the process with ammonia. 8. How must it be used commercially and what are the three processes? 9. Explain the direct expansion method of applying refrigeration. 10. The indirect method. 11. The absorption system. 12. The bottle experiment. 13. What processes are used to make the process more efficient? 14. Describe the can system of making arificial ice. 15. How is pure ice produced? 16. What is the plate system? 17. What is meant by "a 10-ton machine?" 18. Distinguish between ice-making capacity and refrigerating capacity.

SEARCH QUESTIONS ON JANUARY READINGS

1. Who was Joaquin Miller? 2. What was William Vaughn Moody's best work?

I. For what are the following renowned; a) Belgrano; b) San Martin; c) Alvear; d) Rivadavia; e) Mitré; f) Sarmiento? 2. What does Porteño mean?

I. What methods of refrigeration are used in your local

market; cold storage plant; hospital; hotel?

ANSWERS TO SEARCH QUESTIONS ON REQUIRED READING FOR DECEMBER.

1. Sydney Porter. 2. Mrs. Allan Macnaughton.
2. Louis Philippe Marie Ferdinand Gaston d'Orleans, Comte d' Eu, a grandson of Louis Philippe of France, married Isabella, Princess Imperial of Brazil, in 1864. In 1869 and 1870 he compensation of the manded with success the Brazilian forces in Paraguay. 2. Manuel Deadoro da Fonseca was placed at the head of the provisional government of Brazil when Dom Pedro II was deposed in 1889. 1. Answer will vary according to locality.

# Talk About Books

A SHORT HISTORY OF THE AMERICAN PEOPLE. By Edna Henry Lee Turpin. New York: The Macmillan Company. 90c.

Miss Turpin has written an unusual text-book in her "Short History of the American People." She has traced the logical development of the United States, a na on founded on an ideal, with a due sense of cause and effect; he has told with impartiality the contribution of each section to the growth of the whole; and she has been governed in her judgments of actions by a consideration of the motives predominant at the time when they occurred. "Early religious persecutions, British trade laws, New England's slave trading, southern slave holding, are to be judged by the standards and conditions of the times, not by those of the twentieth century." That the book is regarded as fair by a part of the county that

has had good reason to complain of the tone of the histories provided for school use is testified to by the fact that the president of the University of South Carolina, Dr. S. C. Mitchell, furnishes an introduction.

The volume is enriched by an abundance of suggestive teachung helps and supplementary material which is furnished in notes and appendices.

MODERN GEOGRAPHY. By Marion I. Newbigin. New York: Henry

Holt & Co. 75c net.

In this volume of the Home University Library the editor of the Scottish Geographical Magazine has written a "Modern Geography," simple in manner, fascinating in matter, and scientific in interpretation. It is well worth reading by everyone.

INDUSTRIAL AMERICA. By J. Laurence Laughlin. New York: Charles Scribner's Sons. \$1.25 net.

Dr. Laughlin holds the chair of Political Economy in the University of Chicago and has been one of the exchange professors at Berlin. The chapters which make up the material of "Industrial America" were delivered in the form of lectures before German audiences. These foreign hearers necessitated simplicity of exposition of the subject of our industrial problems which suits equally well the needs of intelligent Americans "who may have no time to give to an exhaustive course of reading."

In the opening chapter, on "American Competition with Europe," in addition to discussing the phases of our national life such as education, material resources, improved resources, and management, which enable us profitably to sell our manufactured products across the water, Dr. Laughlin sums in a sentence the truth which supplies the unity of the C. L. S. C. reading course for the coming American Year. "American idealism," he says, "is the main source of American industrial progress; it drives each parent to give the child advantages unknown to the former; it lies behind the endowment and creation of endless private schools, colleges, and universities; it condones rawness now because it sees finish and form in the future; it fills the atmosphere, and even those who do not understand it are infected and moved by it."

The chapter on "Protectionism and Reciprocity" makes a strong brief against the greed and selfishness of the protective system and the absurdity of such reciprocity as we have tried. Comparison of Dr. Laughlin's chapter on "The Labor Problem in the United States" with Prof. Commons's discussion of the same subject in the April, 1911, CHAUTAUQUAN, makes interesting reading in the light of the Chicago student's psychological explanation of

the "passionate discontent" of the working man as the result of "an awakening of ambition, of desire for satisfactions."

Analysis of the trust as an economic force results in a thorough presentation of this subject so vital in the United States today. The forms, history, benefits and evils of trusts, their influence upon labor and competition, their relations to the financial world, and practical methods of controlling their activities are the phases discussed and the chapter should be read carefully since "large combinations have come to stay."

The railway mileage of the United States is nearly equal to the total mileage of the rest of the world and it carries traffic more cheaply than do other railways. These facts precipitate a discussion of the respective advantages of government and of private ownership which the author decides thus: "The private ownership of railways has its justification in having made the whole, rather than a part, of our country rich and populous."

The many vicissitudes through which banking has passed in the last one hundred years, with the operations of the system, have a section to themselves and the book ends with a consideration of "The Present Status of Economic Thinking," with a glance at the thinkers and a tribute to the general advance in economic knowledge.

The book is handsomely produced, having only the fault, common to its kind, of being too heavy in the hand.

The Evolution of Literature. A. S. Mackenzie, State University, Kentucky. Thomas Y. Crowell & Co., New York. \$2.50 net. The purpose of the "Evolution of Literature" is best told by Mr. Mackenzie, himself, in his preface to the book. He says, "The object of this treatise is to try to account for the origin and successive changes of literature as a social phenomenon." It is an anthropological study of the development of literature. As the author feels that no adequate manual of comparative literature has yet been written, he hopes that his work will, to a great extent, supply this need.

The opening chapter deals with the problem of the subject, its difficulties, and compensations which are many and varied. Then follows a chapter on *Primitive Man*, after which the literature is discussed under the four heads, *primitive*, *barbaric*, *autocratic*, and *democratic*. In each class the author discusses the particular form as it appears in Africa, Oceania, Asia, and America, considers rhythm in art, which leads to the arts of dancing and the drama, and finally the lyric, and narration. Thus is traced the evolution of modern literary forms from primitive beginnings through the various stages of civilization.

The book first oppresses the reader with the vastness, and depth of its subject, then attracts, and finally absorbs him. It must accomplish its mission as a tentative manual of comparative literature, and at the same time, lead to the study of literature through its own literary qualities. There is still the biological, the anthropological point of view to be accepted by the conservative, but the definition of literature as "the verbal utterance of man's groping toward the light and beauty of self-realization," and the old Keltic tale of farewell with which the book closes, should harmonize all differences of opinion. "He has found Death and Life. For we know, and God knows, all his dreams. He has found the secret of the sea, the message of all the streams, and the fountain-head of song."

THE EDINBURGH LECTURES ON MENTAL SCIENCE. By T. Troward. New York: Roger Brothers. \$1.25 cloth, 75c paper.

Although metaphysical in theme, Judge Troward's discussions in "The Edinburgh Lectures" have the clearness requisite in explanations made to an audience, and the careful reader need not be afraid to undertake their study. The relationship of spirit and matter in their various expressions, the working of the subjective and objective minds in their creative and performing functions, the office of the will in keeping the imagination up to its duty—all these themes are developed with an intelligence that makes them of superlative interest.

DICTIONARY OF HARD WORDS. By Robert Morris Pierce. New York: Dodd, Mead & Company. \$1.20 net.

To the student of philology, of speech, and of spellings—simplified, clarified, and phonetic—Robert Morris Pierce has given, in his "Dictionary of Hard Words," an additional example of his thorough work as a lexicographer. A preface of some profundity offers an essay on themes connected with word presentation while explaining the methods employed in the volume. For the layman the book requires investigation before it can be used readily.

The format is convenient in every way.

GEORGE THORNE. By Norwal Richardson. Boston: L. C. Page & Co. \$1.25 net.

This story of an imposture has dramatic moments that somehow fail of effectiveness, although the character of the deceived mother is appealing and well worked out. The book is attractively produced.

HEROES OF HISTORY. By Ida Prentice Whitcomb. New York: Charles E. Merrill Company. 60c.

A useful addition to the volumes of the Merrill Supplementary Reading Series is this compendium of brief historical and biographical stories whose purpose is to make the names of starred places and of epoch-creating people familiar to children. It is a useful little handbook, well planned and pleasantly wrought out.

THE CARAVANERS, by the author of Elizabeth and her German Garden. New York: Doubleday, Page & Company. \$1.08 net. Students of the "point of view" in fiction will agree that in "The Caravaners" the author of "Elizabeth and her German Garden" chose the most desirable for novelty, contrast, and humor when she let Baron von Ottringel of Storchwerder tell the story of the outdoor Kentish experiences of a party of English and Germans. The Baron's attitude toward his wife and the other members of the party, toward the scenery, and toward his duties as a coöperative camper, are full of exquisite humor in their revelation of self and of the domestic and social spirit of the Fatherland.

The type of the book is pleasantly large and clear. The illus-

trations fail in the humor they mean to convey.

THE LONG ROLL, By Mary Johnston. Boston: Houghton Mifflin

Company. \$1.40 net.

In "The Long Roll" Miss Johnston has made a noteworthy historical accumulation, re-enforced by data from public archives and private attics and the memories of participants in the Civil War. The volume is the first of a pair which is to cover the whole period of the war. General Jackson, awkward, prayerful, masterful, is the leading figure of this section. The fiction element is negligible.

MARIE-CLAIRE. By Marguerite Audoux. Translated by John Raphael. Introduction by Arnold Bennett. New York: George

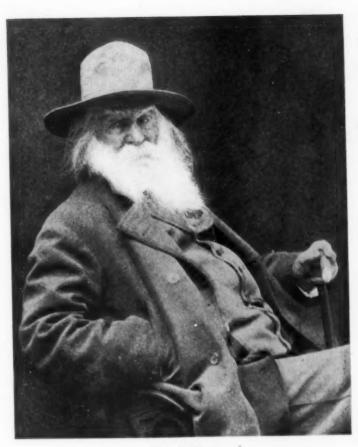
H. Doran Company. \$1.20 net.

Whether or not "Marie-Claire" is the expression of conscious or unconscious genius or of genius at all is a theme open to discussion and as beyond solution as is the possibility of defining the boundary of genius. Of the charm of the simple recital there can be no discussion, however. It is a plotless narrative, the life story of a guileless, imaginative child who saw in figures, never analyzed, never drew conclusions. It is a book unlike others, without literary form, yet memorable. Read it.

THE GREAT MOMENTS IN A WOMAN'S LIFE. By Emily Calvin Blake.

Chicago: Forbes & Company. 75 cents.

Mrs. Blake has brought together in a slender, well-printed volume, under the general title of "The Great Moments in a Woman's Life" the series of story-essays which were recently enjoyed by Ladies Home Journal readers. First love, engagement, housekeeping responsibilities, the baby's demands, the realization of the children's individuality, the giving of the daughter in marriage—these themes are developed wisely and entertainingly.



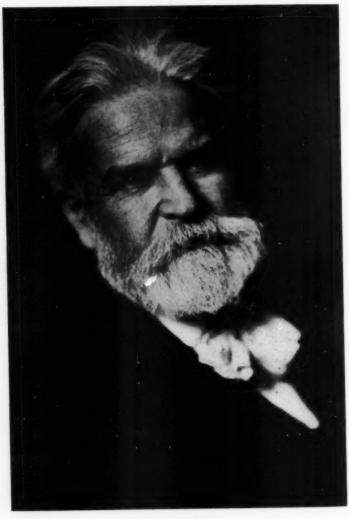
Walt Whitman



(From the National Cyclopedia of American Biography, National Press Bureau Service)



Sargent's Portrait of James Whitcomb Riley



Edwin Markham (Copyright by Pirie MacDonald)